

<b>SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS</b> <i>OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, AND 30</i>				1. REQUISITION NUMBER		PAGE 1 OF 67	
2. CONTRACT NO.		3. AWARD/EFFECTIVE DATE		4. ORDER NUMBER		5. SOLICITATION NUMBER N65540-11-R-5008	
7. FOR SOLICITATION INFORMATION CALL:		a. NAME STACEY THOMPSON				b. TELEPHONE NUMBER (No Collect Calls) 215-897-7160	
6. SOLICITATION ISSUE DATE 28-Feb-2011		8. OFFER DUE DATE/LOCAL TIME 04:00 PM 28 Mar 2011		11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED <input type="checkbox"/> SEE SCHEDULE		12. DISCOUNT TERMS	
9. ISSUED BY NAVAL SURFACE WARFARE CENTER CARDEROCK CODE 3352, STACEY THOMPSON, 5001 SOUTH BR 215-897-7160, STACEY.THOMPSON@NAVY.MIL PHILADELPHIA PA 19112-1403  TEL: 215-897-7160 FAX: 215-897-7059		CODE N65540		10. THIS ACQUISITION IS <input checked="" type="checkbox"/> UNRESTRICTED <input type="checkbox"/> SET ASIDE: % FOR <input type="checkbox"/> SB <input type="checkbox"/> HUBZONE SB <input type="checkbox"/> 8(A) <input type="checkbox"/> SVC-DISABLED VET-OWNED SB <input type="checkbox"/> EMERGING SB SIZE STD: NAICS:		13a. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700) 13b. RATING 14. METHOD OF SOLICITATION <input type="checkbox"/> RFQ <input type="checkbox"/> IFB <input checked="" type="checkbox"/> RFP	
15. DELIVER TO  <b>SEE SCHEDULE</b>		CODE		16. ADMINISTERED BY  CODE			
17a. CONTRACTOR/OFFEROR  TEL. FACILITY CODE		CODE		18a. PAYMENT WILL BE MADE BY  CODE			
<input type="checkbox"/> 17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER		18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a. UNLESS BLOCK BELOW IS CHECKED <input type="checkbox"/> SEE ADDENDUM					
19. ITEM NO.		20. SCHEDULE OF SUPPLIES/ SERVICES		21. QUANTITY		22. UNIT	
						23. UNIT PRICE	
						24. AMOUNT	
		<b>SEE SCHEDULE</b>					
25. ACCOUNTING AND APPROPRIATION DATA						26. TOTAL AWARD AMOUNT (For Govt. Use Only)	
<input type="checkbox"/> 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1. 52.212-4. FAR 52.212-3. 52.212-5 ARE ATTACHED. ADDENDA <input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED							
<input type="checkbox"/> 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4. FAR 52.212-5 IS ATTACHED. ADDENDA <input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED							
28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN <u>3</u> COPIES <input checked="" type="checkbox"/> TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN.				29. AWARD OF CONTRACT: REFERENCE <input type="checkbox"/> OFFER DATED . YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS:			
30a. SIGNATURE OF OFFEROR/CONTRACTOR				31a. UNITED STATES OF AMERICA (SIGNATURE OF CONTRACTING OFFICER)		31c. DATE SIGNED	
30b. NAME AND TITLE OF SIGNER (TYPE OR PRINT)				30c. DATE SIGNED		31b. NAME OF CONTRACTING OFFICER (TYPE OR PRINT)  TEL: EMAIL:	

**SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS  
(CONTINUED)**

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19. ITEM NO.	20. SCHEDULE OF SUPPLIES/ SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
	SEE SCHEDULE				

32a. QUANTITY IN COLUMN 21 HAS BEEN  
☐ RECEIVED ☐ INSPECTED ☐ ACCEPTED, AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED: \_\_\_\_\_

32b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

32c. DATE

32d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

32e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE

32f. TELEPHONE NUMBER OF AUTHORIZED GOVERNMENT REPRESENTATIVE

32g. E-MAIL OF AUTHORIZED GOVERNMENT REPRESENTATIVE

33. SHIP NUMBER

34. VOUCHER NUMBER

35. AMOUNT VERIFIED CORRECT FOR

36. PAYMENT  
☐ COMPLETE ☐ PARTIAL ☐ FINAL

37. CHECK NUMBER

38. S/R ACCOUNT NUMBER

39. S/R VOUCHER NUMBER

40. PAID BY

41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT

41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER

41c. DATE

42a. RECEIVED BY (Print)

42b. RECEIVED AT (Location)

42c. DATE REC'D (YY/MM/DD)

42d. TOTAL CONTAINERS

AUTHORIZED FOR LOCAL REPRODUCTION  
PREVIOUS EDITION IS NOT USABLE

STANDARD FORM 1449 (REV 3/2005) BACK  
Prescribed by GSA  
FAR (48 CFR) 53.212

## Section SF 1449 - CONTINUATION SHEET

SPECIFICATIONSNOTES:

1. This requirement is for the manufacture and delivery of voltage regulators and components as specified under Section B below and in accordance with the specification listed herein. The regulators and components will be installed onboard MCM and LSD-41 class ships. Field Service support is also required under this procurement.
2. The contract resulting from this solicitation shall be a Firm Fixed Price, Indefinite-Delivery, Indefinite-Quantity type contract. The equipment and field services support shall be ordered through the issuance of delivery orders.
3. The ordering period shall be from date of contract award through fifty-four (54) months thereafter. The period of performance is from date of contract award through sixty (60) months.
4. Delivery is required sixty (60) days after issuance of each delivery order.
5. As referred to in paragraph (b) of FAR clause 52.216-22 "Indefinite-Quantity" of this RFP, the contract minimum quantity to be ordered is ten (10) units (total). The contract maximum is the total amount of all items. The maximum quantity is not to be exceeded without prior approval of the Procuring Contracting Officer.
6. ALL LARGE BUSINESSES ARE REQUIRED TO SUBMIT "SMALL BUSINESS SUBCONTRACTING PLANS" PURSUANT TO FAR 52.219-9

## VOLTAGE REGULATOR SPECIFICATIONS

## VOLTAGE REGULATOR SYSTEM

## 1.1 SCOPE

This specification describes a digital excitation system and auxiliary excitation equipment for use on a synchronous generator. The new digital excitation system will be designed to replace the existing voltage regulator providing excitation current to the shunt field of the brushless rotating exciter. The new digital excitation system will be complete with controls, limiters, protection and event recorders to safeguard the generator. The digital regulator shall be provided with an intuitive, user-friendly Microsoft Windows™-based software program for easy setup and commissioning of the excitation system, as well as Front Panel HMI or RS 485 serial link communications using Modbus□ protocol for control, metering and annunciation. The software shall be provided at no additional cost.

## 1.2 GENERAL

A digital voltage regulator with at least  $\pm 0.25\%$  voltage regulation accuracy during steady state conditions over the load range at rated power factor and constant generator frequency will be provided to supply the volt-ampere requirements of the brushless exciter field. The digital regulator shall have a robust internal full wave bridge rectifier rated for a minimum of 20 Adc continuous output and a field forcing rating of 40 Adc. The rectifier bridge shall consist of 6 thyristors (Silicon Controlled Rectifiers) for negative field forcing capability and have an internal crowbar circuit to rapidly decay the generator voltage during shutdown. It shall be capable of operating with either single phase or three phase input power at 120 Vac. The excitation system will be a high initial response design as defined by IEEE 421.2.

The voltage regulator shall be capable of accepting control power from an external 24 Vdc and 24 Vac power source. A stepdown transformer of proper Volt-Ampere rating from 120 Vac to 24 Vac shall be provided by the vendor.

In addition to the digital voltage regulator, an independent manual excitation control device shall be provided with an appropriate switch to facilitate a dead transfer between the manually operated device and the digital voltage regulator or vice versa. The manual control device shall be rated for a minimum of 20 Adc continuous output current. The manual control device setpoint shall be adjustable with a vendor supplied potentiometer.

The system shall be designed to start in the Automatic Voltage Regulator (AVR) mode with a softstart control to minimize or eliminate voltage overshoot on initial voltage buildup. When starting the generator in the automatic mode, a high current output relay internal to the digital automatic voltage regulator with a make rating of 30 Adc for 0.2s will automatically control field flashing when a Start command is initiated. The digital automatic voltage regulator will provide programmable overflash protection. It shall remove field flashing after a programmable time delay expires if generator voltage has not built up. Field flashing shall automatically drop out after the generator voltage has built up higher than a programmable percentage of generator voltage. An output contact from the regulator shall indicate a failure to build generator voltage.

A series boost type reservoir assembly employing ferro-resonant principles with two power current transformers shall provide relatively constant 120 Vac operating power to the rectifier bridges of both the digital regulator and manual voltage control device during normal operating conditions and during generator short circuit conditions. The inputs to the reservoir assembly are single phase generator voltage and generator line current. The Current Transformers (CT) provide virtually all power input to the regulator during periods of overload or short circuit. As the load varies from no load to full load, the source of the power to the regulator will shift from the reservoir assembly to the Current Transformers. Surge protection shall be included on the output of the reservoir assembly.

External semiconductor rated, high speed fuses shall be supplied and sized to coordinate with the internal Silicon Controlled Rectifiers of the digital voltage regulator.

Existing Voltage Transformers and Current Transformers will be used for generator voltage sensing and reactive load sharing between paralleled generators.

### 1.3 DIGITAL VOLTAGE REGULATOR TECHNICAL SPECIFICATIONS

#### 1.3.1 Voltage Regulator Control

The digital voltage regulator will provide  $\pm 0.25\%$  voltage regulation from no load to full load. The minimum control range of the automatic voltage regulator will be  $-30\%$  to  $+10\%$  of the nominal generator terminal voltage. The temperature drift will not exceed  $0.5\%$  for slow changes in ambient temperatures ranging from  $0^{\circ}\text{C}$  to  $50^{\circ}\text{C}$ . Standard voltage sensing inputs will be 120 to 600 volts nominal, single or three phase, 60 Hz.

#### 1.3.2 Reactive Droop, Line Drop Compensation

Paralleling provisions will be included to provide reactive load sharing between paralleled generators. The droop setting will be adjustable from  $-30\%$  to  $+30\%$  at rated power factor, rated load. A negative droop setting will provide Line Drop Compensation to counteract line or transformer impedance voltage drops to maintain a constant load voltage at a remote point in an isolated power system.

#### 1.3.3 PID Tuning

The automatic voltage regulator will utilize field tunable Proportional-Integral-Derivative (PID) gain settings to provide a means to optimize generator voltage response with minimal voltage overshoot. A software setup program will be provided to assist in the selection of the PID values to help optimize voltage regulator system performance along with Front Panel HMI access.

#### 1.3.4 Preposition Setpoint

A preposition setpoint contact input will be provided for each (AVR, Field Current Regulator, and Var/PF) operating mode. The Preposition setpoint will be programmable using the setup software or Front Panel HMI.

#### 1.3.5 Integrated Manual Field Current Regulator

A field current regulator mode will be provided as standby to the automatic operating modes to maintain constant field current with 1% regulation for 10% changes in bridge input voltage or 20% changes in field resistance. The control range will be from 0% to 120% of rated field current.

#### 1.3.6 SCR Power Rectifier Bridge

A six-Silicon Controlled Rectifier, two-quadrant, three-phase full-wave bridge rectifier will be provided to rectify the output of the series boost device to produce DC excitation required to excite the generator. The rectifier will be capable of forcing the field voltage either positive or negative during transient conditions. The rectifier will be designed for only positive current flow. The power semiconductors in the rectifier will have a PIV rating of not less than three times the maximum root-mean-square voltage of the ac input voltage to the rectifier bridge. Resistor-Capacitor snubber circuits will be provided for the ac input and dc output.

#### 1.3.7 Field Discharge

A “crowbar” type field discharge circuit will be provided consisting of one Silicon Controlled Rectifier. Field overvoltage will be clamped by a metal oxide varistor. During shutdown or if the field voltage surpasses 800 Vdc for 0.5 ms, the crowbar Silicon Controlled rectifier will gate on and discharge the field energy through the resistance of the exciter field.

#### 1.3.8 Automatic Field Flash

The digital voltage regulator will automatically flash the generator field using power from the ship's 24 Vdc battery to build generator voltage during system startup. The controller will terminate field flashing when generator voltage builds to a user programmable value of machine voltage. If generator voltage does not build to the preset value within a field programmable time limit, the controller will alarm the condition by output contact.

#### 1.3.9 Under Excitation Limiter (UEL)

An under-excitation limiter will be provided to prevent a loss of generator synchronism due to underexcitation. The under excitation limiter characteristic curve will be programmable to utilize either a single point, pre-defined circular curve or a five point characteristic that may be programmed to approximate the generator's under excited capability curve. The controller will provide indication via a RS 485 Modbus™ communication link and a contact closure when the UEL is activated.

#### 1.3.10 Over Excitation Limiter (OEL)

Both off-line and on-line over excitation limiters will be provided to prevent generator overvoltage when the generator is not synchronized to the system, and to prevent rotor field heating due to excessive field current when the generator is on-line.

#### 1.3.11 Volts per Hertz Ratio Limiter

The digital voltage regulator will be equipped with two selectable types of volts per Hertz limiter, each of which reduces the generator terminal voltage as prime mover frequency reduces to avoid overfluxing the generator or

connected magnetics. The “underfrequency compensation” type limiter is activated when the generator frequency drops below a preselected frequency value, and regulates generator voltage with a user-defined slope, adjustable between 0.0 and 3.0 PU. The threshold frequency and slope will be adjustable using a Windows based PC software program provided with the excitation system for setup or Front Panel HMI. An alarm will be provided on the controller to indicate underfrequency operation.

The volts per Hertz ratio limiter regulates voltage based on a customer defined volts per Hertz slope adjustable between 0.0 and 3.0 PU.

#### 1.3.11 Accessory Input

The automatic digital voltage regulator units shall accept accessory analog signals from other controllers for remote control of the setpoint. The two types of accessory inputs are voltage and current. The voltage input shall accept a signal over the range of -10 VDC to +10VDC and the current input shall accept a signal over the range of 4 mADC to 20 mADC.

#### 1.2.13 Physical Requirements

The automatic digital voltage regulator should be no larger than 12.0”H x 9.0”W x 8.0”D and weigh no more than 20 lbs.

### 1.4 PROTECTION FEATURES

The excitation system will be equipped with the following protective features:

#### 1.4.1 Generator Overvoltage

Adjustable from 100-150% with adjustable time delay

#### 1.4.2 Generator Undervoltage

Adjustable from 25-100% with adjustable time delay

#### 1.4.3 Loss of Voltage sensing

Adjustable time delay of 0-10 seconds. User programmable to transfer to the digital regulators Field Current Regulator mode.

#### 1.4.4 Field Overvoltage

Adjustable from 1-325 Vdc with adjustable time delay

#### 1.4.5 Field Overcurrent

Adjustable from 0.1 to 40 amperes dc with an adjustable time delay

#### 1.4.6 Loss of Field

Monitors absorbing reactive power with adjustable time delay

#### 1.4.7 Exciter Diode Monitor

Provides detection of open or shorted brushless exciter diodes.

#### 1.4.8 Summary Alert

A summary function will monitor the microprocessors and provide a contact to trip in the event of a fault within the microprocessors. Alarm annunciation will be provided via the RS 485 communication serial link and user settable contacts for hardwire annunciation.

### 1.5 HUMAN MACHINE INTERFACE

The Digital Regulator shall have a liquid crystal display 128 x 64 pixel with LED backlighting. The LCD shall display operations, setpoints loop gains, metering, protection functions, system parameters, general settings and alarms. A password protected keypad shall provide access to settings and other menu navigational functions. A default screen shall provide the metered parameters of 3 programmable generator parameters as well as setpoint indication, setpoint adjustment range and notify if alarms are present.

The Digital Regulator shall also include front panel LED's to indicate the following conditions:

Null Balance - indicates that the automatic tracking between AVR and Field Current Regulator modes is complete and transfer from one mode to another will be bumpless.

Internal Tracking – indicates that the inactive operating modes are tracking the active mode for bumpless transfer

Pre-Position – indicates that the programmable pre-selected setpoint of the active operating mode has been achieved.

Upper Limit – indicates that the upper setpoint adjustment range of the operating mode has been reached.

Lower Limit – indicates that the lower setpoint adjustment range of the operating mode has been reached.

### 1.6 COMMUNICATIONS

The digital regulator shall support Modbus™ Communication Protocol for operation, setting changes and metering information through an RS 485 communication port.

A 9 pin RS-232 communication port on the regulator shall provide means to program the digital regulator through a standard PC and the vendor shall provide intuitive, user friendly, MS Windows™ based communication software for setup and commissioning as well as retrieval of sequence of event records and oscillography files.

#### 1.7 DATA LOGGING & EVENT RECORDING

A sequence of event recorder shall monitor the internal and external status of the digital regulator. Events shall be scanned at least 50 ms intervals and shall store at least 127 events. All changes of state that occur during each shall be time tagged. Sequence of event reports are to be made available through the front panel RS 232 port with the communication software.

An Oscillography recorder shall be capable of capturing up to eight records. Each record shall consist of at least six user selectable variables with 600 data points recorded for each variable. The sample rate or time between data point samples shall be user selectable between 4 ms to 10s. Data points may be selected for pre-trigger operation in order to capture events prior to a fault. Data to be captured include but are not limited to generator voltage, frequency, line current, KVA, KW, KVAR, PF, Field Voltage Field Current, AVR error signal, and generator V-I phase angle. The oscillography records shall be accessible through the front panel RS 232 communication port via the communication software.

### 2.0 POWER CURRENT TRANSFORMER

#### 2.1 SCOPE

The Power Current Transformer will work in conjunction with the Reservoir Assembly (Item 00013). Together, they will furnish a constant 120 VAC operating power to the automatic and manual voltage regulator during all operational stage and conditions, especially during severe generator overload and short circuit conditions. The Current Transformers provide virtually all power input to the

regulator during periods of overload or short circuit. As the load varies from no load to full load, the source of the power to the regulator will shift from the reservoir assembly to the Current Transformer.

## 2.2 POWER CURRENT TRANSFORMER TECHNICAL SPECIFICATION

### 2.2.1 Electrical Specification

- a. Short Circuit Maximum Exciter Field Rating: 8.4A
- b. 3 Phase Short Circuit Line Current Rating: 1838A
- c. Primary/Secondary Winding Rating: 1:150, 1:189, 1:238

### 2.2.2 Physical Specification

- a. The maximum size of the power current transformer should be no larger than 8.0" H x 11.0" W x 5.0" D and 50 lbs limit.

## 3.0 RESERVOIR ASSEMBLY

### 3.1 SCOPE

Starting up large motors can be very strenuous to a brushless exciter generator over a period of time. The overloading running currents can be several times the rated output generator currents which can be very stressful to the field of the generator. In addition, line currents should also be maintained during a short circuit fault conditions on most generating systems. Voltage regulators which is regulating the output voltage of a generator will be unable to meet these requirements mainly because the generator output voltage provides the voltage regulator power. Thus, a total loss of excitation power can result if there is a significant decrease in the generator output voltage which will affect the voltage regulators ability to supply enough power to excite the field. As a result, an Excitation Support System which is normally consist of a current boost (Reservoir Assembly) and power current transformers (Item 0007) is usually supplied together and work in conjunction to the automatic voltage regulator and the manual voltage regulator to compensate for the power loss during overloading and short circuit conditions.

A series boost type reservoir assembly employing ferro-resonant principles with two power current transformers shall provide relatively constant 120 Vac operating power to the rectifier bridges of both the digital regulator and manual voltage control device during normal operating conditions and during generator short circuit conditions. The inputs to the reservoir assembly are single phase generator voltage and generator line current.

## 3.2 RESERVOIR ASSEMBLY TECHNICAL SPECIFICATION

### 3.2.1 Electrical Specification

- a. Input Power Ratings: 450VAC, 60Hz
- b. Output Power Rating: 120VAC, 7A

### 3.2.2 Physical Specification

- a. Size & Weight: The maximum size of the Reservoir Assembly should be no larger than 8.0" H x 19.0" W x 5.0" D and 50 lbs limit.

## 4.0 MANUAL VOLTAGE REGULATOR

### 4.1 SCOPE

A Manual Voltage Regulator is usually served as a backup to an automatic voltage Regulator (AVR). The functionality of the Manual Voltage Regulator (MVR) is basically a carbon copy of the AVR. Therefore, an independent manual excitation control device shall be provided with an appropriate switch to facilitate a dead transfer between the manually operated device and the automatic digital voltage regulator or vice



versa. The manual control device shall be rated for a minimum of 20 Adc continuous output current. The manual control device setpoint shall be adjustable with a vendor supplied potentiometer.

## 4.2 MANUAL VOLTAGE REGULATOR TECHNICAL SPECIFICATIONS

### 4.2.1 Electrical Specification

- a. Input Power Rating: 45-70VAC, 90-153VAC, 170-305VAC, 50-400Hz, single phase.
- b. Output Power Rating: 32VDC, 63VDC, 125VDC at minimum of 20ADC.
- c. Regulation Accuracy: 2% regulation for a 10% change in input power. 5% regulation for a 30% change in input power.
- d. Field Resistance: 0.88 Ohm at 32 VDC output, 1.75 Ohm at 63VDC output, 3.47 Ohm at 125VDC output.
- e. Dissipated Power: 85 Watts
- f. Minimum Residual Build-Up Voltage: 10% of 60VAC, 5% of 120VAC, 5% of 240VAC.
- g. Manual Voltage Adjust Control: 10kOhm, 1W potentiometer.

### 4.2.2 Physical Specification

- a. Size & Weight: The maximum size of the MVR should be no larger than 12" H x 14.0" W x 5.0" D and 18 lbs limit.

## 5.0 DUAL AUTOMATIC VOLTAGE REGULATOR

### 5.1 SCOPE

A dual digital automatic voltage regulator system will be designed to provide a redundant excitation source for brushless rotating exciters on synchronous generators. The dual digital excitation system will provide complete backup control to the primary voltage regulator control including sequencing relays and interface terminal blocks for interconnection.

The redundant digital excitation system will be complete with controls, limiters, along with the HMI protection and event recorders to safeguard the generator. The digital regulator shall be provided with an intuitive, user-friendly Microsoft Windows™-based software program for easy setup and commissioning of the excitation system, as well as RS 485 serial link communications using Modbus protocol for control, metering and annunciation. The software shall be provided at no additional cost.

### 5.2 GENERAL

A digital voltage regulator with at least  $\pm 0.25\%$  voltage regulation accuracy during steady state conditions over the load range at rated power factor and constant generator frequency will be provided to supply the volt-ampere requirements of the brushless exciter field. The digital regulator shall have a robust internal full wave bridge rectifier rated for a minimum of 20 Adc continuous output and a field forcing rating of 40 Adc. The rectifier bridge shall consist of 6 thyristors (Silicon Controlled Rectifiers) for negative field forcing capability and have an internal crowbar circuit to rapidly decay the generator voltage during shutdown. The system shall be designed for rectifier bridge input power frequencies ranging from 50 to 500 Hertz from a permanent magnet generator. It shall be capable of operating with either single phase or three phase input power. The excitation system will be a high initial response design as defined by IEEE 421.2.

The voltage regulators shall be capable of accepting control power from an external 24 Vdc and 24 Vac power source simultaneously. A stepdown transformer from 120 Vac to 24 Vac of proper VA rating shall be provided by the vendor.

The system shall be designed to start in the Automatic Voltage Regulator (AVR) mode with a softstart control to minimize or eliminate voltage overshoot on initial voltage buildup.

Existing Voltage Transformers (VT) and Current Transformers (CT) will be used for generator voltage sensing and reactive load sharing between paralleled generators.

The redundant controllers will be designed to track each other's output level in the AVR mode for bumpless transfer between regulators. Digital voltage regulator (A) will be designated the primary voltage regulator and digital voltage regulator (B) will be considered the backup, tracking the primary regulator's output.

A summary circuit within the digital voltage regulators shall monitor execution of the firmware code and internal power supplies. Should primary (A) voltage regulator fail, a summary contact will cause transfer to the secondary (B) unit. Automatic fault transfer will always occur from regulator (A) defined as the primary to regulator (B) the secondary.

Manual transfer capability between regulator (A) and regulator (B) and vice versa shall be provided, allowing bumpless transfer in AVR mode. If the operating unit is designated as backup regulator (B), via the external switch, and should a summary determine a failure within the unit, a contact will be provided to immediately trip the 86 relay, hence the generator.

Normal operating mode will be AVR mode, should a loss of voltage sensing occur, the system will transfer to Field Current Regulator (FCR) manual mode and raise/lower control will affect manual mode setpoint only until the problem has been resolved.

Voltage matching will be provided to allow automatic voltage matching between the generator and the connecting utility bus. Voltage matching will be enabled in AVR mode only.

An independent field overcurrent relay shall monitor field current. The relay shall be coordinated so as to transfer control to the backup regulator if the field current surpasses the set threshold after an extended period of time.

### 5.3 DUAL AUTOMATIC VOLTAGE REGULATOR TECHNICAL SPECIFICATIONS

#### 5.3.1 Voltage Regulator Control

The digital voltage regulator will provide  $\pm 0.25\%$  voltage regulation from no load to full load. The minimum control range of the automatic voltage regulator will be  $-30\%$  to  $+10\%$  of the nominal generator terminal voltage. The temperature drift will not exceed  $0.5\%$  for slow changes in ambient temperatures ranging from  $0^{\circ}\text{C}$  to  $50^{\circ}\text{C}$ . Standard voltage sensing inputs will be 120 to 600 volts nominal, single or three phase, 50 or 60 Hz.

#### 5.3.2 Reactive Droop, Line Drop Compensation

Paralleling provisions will be included to provide reactive load sharing between paralleled generators. The droop setting will be adjustable from  $-30\%$  to  $+30\%$  at rated power factor, rated load. A negative droop setting will provide Line Drop Compensation to counteract line or transformer impedance voltage drops to maintain a constant load voltage at a remote point in an isolated power system.

#### 5.3.3 PID Tuning

The automatic voltage regulator will utilize field tunable Proportional-Integral-Derivative (PID) gain settings to provide a means to optimize generator voltage response with minimal voltage overshoot. A software setup program will be provided to assist in the selection of the PID values to help optimize voltage regulator system performance along with access via HMI.

#### 5.3.4 Preposition Setpoint

A preposition setpoint contact input will be provided for each (AVR, Field Current Regulator, and Var/PF) operating mode. The Preposition setpoint will be programmable using the setup software.

#### 5.3.5 Integrated Manual Field Current Regulator

A field current regulator mode will be provided as standby to the automatic operating modes to maintain constant field current with 1% regulation for 10% changes in bridge input voltage or 20% changes in field resistance. The control range will be from 0% to 120% of rated field current.

#### 5.3.6 SCR Power Rectifier Bridge

A six-Silicon Controlled Rectifier, two-quadrant, three-phase full-wave bridge rectifier will be provided to rectify the output of the series boost device to produce DC excitation required to excite the generator. The rectifier will be capable of forcing the field voltage either positive or negative during transient conditions. The rectifier will be designed for only positive current flow. The power semiconductors in the rectifier will have a PIV rating of not less than three times the maximum root-mean-square voltage of the ac input voltage to the rectifier bridge. Resistor-Capacitor snubber circuits will be provided for the ac input and dc output.

#### 5.3.7 Field Discharge

A "crowbar" type field discharge circuit will be provided consisting of one Silicon Controlled Rectifier. Field overvoltage will be clamped by a metal oxide varistor. During shutdown or if the field voltage surpasses 800 Vdc for 0.5 ms, the crowbar SCR will gate on and discharge the field energy through the resistance of the exciter field.

#### 5.3.8 Automatic Field Flash

The digital voltage regulator will automatically flash the generator field using power from the ship's Permanent Magnet Alternator to build generator voltage during system startup. The controller will terminate field flashing when generator voltage builds to a user programmable value of machine voltage. If generator voltage does not build to the preset value within a field programmable time limit, the controller will alarm the condition by output contact.

#### 5.3.9 Under Excitation Limiter (UEL)

An under-excitation limiter will be provided to prevent a loss of generator synchronism due to underexcitation. The under excitation limiter characteristic curve will be programmable to utilize either a single point, pre-defined circular curve or a five point characteristic that may be programmed to approximate the generator's under excited capability curve. The controller will provide indication via a RS 485 Modbus™ communication link and a contact closure when the UEL is activated.

#### 5.3.10 Over Excitation Limiter (OEL)

Both off-line and on-line over excitation limiters will be provided to prevent generator overvoltage when the generator is not synchronized to the system, and to prevent rotor field heating due to excessive field current when the generator is on-line.

#### 5.3.11 Volts per Hertz Ratio Limiter

The digital voltage regulator will be equipped with a customer selectable choice of two types of volts per Hertz limiters, each of which reduces the generator terminal voltage as prime mover frequency reduces to avoid overfluxing the generator or connected magnetics. The "underfrequency compensation" type limiter is activated when the generator frequency drops below a preselected frequency value, and regulates generator voltage with a user-defined slope, adjustable between 0.0 and 3.0 PU. The threshold frequency and slope will be adjustable using a Windows based PC software program provided with the excitation system for setup. An alarm will be provided on the controller to indicate underfrequency operation.

The volts per Hertz ratio limiter regulates voltage based on a customer defined volts per Hertz slope adjustable between 0.0 and 3.0 PU.

#### 5.3.12 Accessory Input

The automatic digital voltage regulator units shall accept accessory analog signals from other controllers for remote control of the setpoint. The two types of accessory inputs are voltage and current. The voltage input shall accept a signal over the range of -10 VDC to +10VDC and the current input shall accept a signal over the range of 4 mADC to 20 mADC.

#### 5.3.13 Physical Requirements

The two automatic digital voltage regulator should be no larger than 12.0"H x 9.0"W x 8.0"D and weigh no more than 20 lbs each.

### 5.4 PROTECTION FEATURES

The excitation system will be equipped with the following protective features:

#### 5.4.1 Generator Overvoltage

Adjustable from 100-150% with adjustable time delay

#### 5.4.2 Generator Undervoltage

Adjustable from 25-100% with adjustable time delay

#### 5.4.3 Loss of Voltage sensing

Adjustable time delay of 0-10 seconds. User programmable to transfer to the digital regulators Field Current Regulator mode.

#### 5.4.4 Field Overvoltage

Adjustable from 1-325 Vdc with adjustable time delay

#### 5.4.5 Field Overcurrent

Adjustable from 0.1 to 40 amperes dc with an adjustable time delay

#### 5.4.6 Loss of Field

Monitors absorbing reactive power with adjustable time delay

#### 5.4.7 Exciter Diode Monitor

Provides detection of open or shorted brushless exciter diodes.

#### 5.4.8 Summary Alert

A summary function will monitor the microprocessors and provide a contact to trip in the event of a fault within the microprocessors. Alarm annunciation will be provided via the RS 485 communication serial link and user settable contacts for hardwire annunciation.

## 5.5 HUMAN MACHINE INTERFACE

The Digital Regulator shall have a liquid crystal display 128 x 64 pixel with LED backlighting. The LCD shall display operations, setpoints loop gains, metering, protection functions, system parameters, general settings and alarms. A password protected keypad shall provide access to settings and other menu navigational functions. A default screen shall provide the metered parameters of 3 programmable generator parameters as well as setpoint indication, setpoint adjustment range and notify if alarms are present.

The Digital Regulator shall also include front panel LED's to indicate the following conditions:

Null Balance - indicates that the automatic tracking between AVR and FCR modes is complete and transfer from one mode to another will be bumpless.

Internal Tracking – indicates that the inactive operating modes are tracking the active mode for bumpless transfer

Pre-Position – indicates that the programmable pre-selected setpoint of the active operating mode has been achieved.

Upper Limit – indicates that the upper setpoint adjustment range of the operating mode has been reached.

Lower Limit – indicates that the lower setpoint adjustment range of the operating mode has been reached.

## 5.6 COMMUNICATIONS

The digital regulator shall support Modbus™ Communication Protocol for operation, setting changes and metering information through an RS 485 communication port.

A 9 pin RS-232 communication port on the regulator shall provide means to program the digital regulator through a standard PC and the vendor shall provide intuitive, user friendly, MS Windows™ based communication software for setup and commissioning as well as retrieval of of sequence of event records and oscillography files.

## 5.7 DATA LOGGING & EVENT RECORDING

A sequence of event recorder shall monitor the internal and external status of the digital regulator. Events shall be scanned at least 50 ms intervals and shall store at least 127 events. All changes of state that occur during each shall be time tagged. Sequence of event reports are to be made available through the front panel RS 232 port with the communication software.

An Oscillography recorder shall be capable of capturing up to eight records. Each record shall consist of at least six user selectable variables with 600 data points recorded for each variable. The sample rate or time between data point samples shall be user selectable between 4 ms to 10s. Data points may be selected for pre-trigger operation in order to capture events prior to a fault. Data to be captured include but are not limited to generator voltage, frequency, line current, KVA, KW, KVAR, PF, Field Voltage Field Current, AVR error signal, and generator V-I phase angle. The oscillography records shall be accessible through the front panel RS 232 communication port via the communication software.

## 6.0 AUTOMATIC VOLTAGE REGULATOR 01

### 6.1 SCOPE

This specification establishes requirements for a single or three phase, 60 Hertz alternating current (AC) Automatic Voltage Regulators (AVR) intended for shipboard generator application. The AVR shall be designed to accept a redundant control power source rated at 24VAC and or 24/48VDC and supply an output field voltage of 63VDC or 125VDC with a maximum field current of 20 ADC.

### 6.2 AUTOMATIC VOLTAGE REGULATOR 01 TECHNICAL SPECIFICATIONS

#### 6.2.1 Electrical Specifications

- a. Redundant Input Control Power: (Single phase 24/48 VDC, 30 Watts), (single phase 24VAC, 50/60Hz, 40VA).
- b. Input Operating Power: Single or three phase, 120VAC or 208VAC, 50 to 160Hz.
- c. Output Field Voltage: Single phase, 63 VDC or 125 VDC, 20 ADC maximum.
- d. Generator Voltage Sensing: Single or three phase sensing, burden cannot be greater than 1 VA for each phase, 60 Hz, 120VAC or 450VAC sensing.
- e. Generator Current Sensing: 60 Hz, burden cannot be greater than 1VA, 1A AC or 5A AC.
- f. Bus Voltage Sensing: Single phase, burden cannot be greater than 1 VA, 60 Hz, 120VAC or 450VAC sensing.
- g. Input Contacts: dry contacts for starting, stopping, auto voltage regulation, manual voltage regulation, raise and lowering, alarm reset, unit/paralleling.
- h. Communication Ports: Build-in RS-232 and RS-485 connector.
- i. Regulation Mode: The voltage regulator must have build-in automatic, manual, var, and power factor operating mode.
- j. Paralleling Method: The voltage regulator must have a build-in mode of paralleling in reactive droop and cross current compensation.
- k. Generator Protection Features: Voltage regulator needs to have build-in generator protection features for over-voltage protection, under-voltage protection, exciter field over-voltage, exciter field over-current, exciter diode protection, loss of field protection, loss of sensing protection, soft start capability, field flashing functionality, voltage matching, and over and under excitation protection.
- l. Metering requirements: The voltage regulator shall have a build in HMI screen on the front of the unit for programming and viewing the generator parameters such as generator voltage, generator current, generator frequency, bus voltage, bus frequency, phase angle, field voltage, field current, power factor, real power, and reactive power.
- m. Event Recording: The voltage regulator should have the capability to record all status, events, and alarms while the generator is running. The event report shall be able to be retrieve via laptop computer using the OEM software.
- n. Data Logging: The voltage regulator shall have a build-in strip chart recorder or something equivalent for logging data.

#### Physical Specifications

- a. Size & Weight: The maximum size of the AVR should be no larger than 12.0" H x 9.0" W x 8.0" D and 20 lbs limit.

#### 7.0 AUTOMATIC VOLTAGE REGULATOR 02

This AVR shall have the same technical specification as Item 0006, with the exception that the electrical requirements for the input operating power should be rated between 161 to 420 Hz.

#### 8.0 AUTOMATIC VOLTAGE REGULATOR 03

This AVR shall have the same technical specification as Item 0006, with the exception that the electrical requirements for the input operating power should be rated between 421 to 500 Hz.

#### 9.0 AUTOMATIC VOLTAGE REGULATOR 04

- 9.1 This AVR shall have the same technical specification as Item 00031, with the exception that the electrical requirements for the Redundant Input Control Power is (Single phase 125 VDC, 30 Watts), (Single phase 120 VAC, 50/60Hz, 40VA).

#### 10.0 AUTOMATIC VOLTAGE REGULATOR 05

10.1 This AVR shall have the same technical specification as Item 00031, with the exception that the electrical requirements for the Redundant Input Control Power is (Single phase 125 VDC, 30 Watts), (single phase 120 VAC, 50/60Hz, 40VA) and input operating power should be rated between 161 to 420 Hz.

#### 11.0 AUTOMATIC VOLTAGE REGULATOR 06

11.1 This AVR shall have the same technical specification as Item 00031, with the exception that the electrical requirements for the Redundant Input Control Power is (Single phase 125 VDC, 30 Watts), (Single phase 120 VAC, 50/60Hz, 40VA) and input operating power should be rated between 421 to 500 Hz.

#### 12.0 AUTOMATIC VOLTAGE REGULATOR 07

##### 12.1 SCOPE

This specification establishes requirements for a single or three phase, 60 Hertz alternating current (AC) Automatic Voltage Regulators (AVR) intended for shipboard generator application. The AVR shall be designed to accept a control power source rated at 24VDC and supply an output field voltage of 32VDC, 63VDC, or 125VDC with a maximum field current of 15 ADC.

#### 12.2 AUTOMATIC VOLTAGE REGULATOR 07 TECHNICAL SPECIFICATION

##### 12.2.1 Electrical Specification

- a. Redundant Input Control Power: (Single phase, 24/48 VDC, 30 Watts).
- b. Input Operating Power: Single or three phase, 60 VAC, 120VAC, or 240 VAC, 50-500Hz.
- c. Output Field Voltage: Single phase, 32 VDC, 63 VDC or 125 VDC, 15 ADC maximum.
- d. Tracking: Internal auto-tracking function.
- e. Generator Voltage Sensing: Single or three phase sensing, burden cannot be greater than 1 VA for each phase, 60 Hz, 120VAC or 450VAC sensing.
- f. Generator Current Sensing: 60 Hz, burden cannot be greater than 1VA, 1A AC or 5A AC.
- g. Bus Voltage Sensing: Single phase, burden cannot be greater than 1 VA, 60 Hz, 120VAC or 450VAC sensing.
- h. Input Contacts: dry contacts for starting, stopping, auto voltage regulation, manual voltage regulation, raise and lowering, alarm reset, unit/paralleling.
- i. Communication Ports: Build-in RS-232 and RS-485 connector.
- j. Regulation Mode: The voltage regulator must have build-in automatic, manual, var, and power factor operating mode.
- k. Paralleling Method: The voltage regulator must have a build-in mode of paralleling in reactive droop and cross current compensation.
- l. Generator Protection Features: Voltage regulator needs to have build-in generator protection features for over-voltage protection, under-voltage protection, exciter field over-voltage, exciter field over-current, exciter diode protection, loss of sensing protection, soft start capability, voltage matching, and over and under excitation protection.
- m. Metering requirements: The voltage regulator shall have a build in HMI screen on the front of the unit for programming and viewing the generator parameters such as generator voltage, generator current, generator frequency, bus voltage, bus frequency, phase angle, field voltage, field current, power factor, real power, and reactive power.
- n. Event Recording: The voltage regulator should have the capability to record all status, events, and alarms while the generator is running. The event report shall be able to be retrieve via laptop computer using the OEM software.
- o. Data Logging: The voltage regulator shall have a build-in strip chart recorder or sometime equivalent for logging data.

#### Physical Specification

- a. Size & Weight: The maximum size of the AVR should be no larger than 12.0" H x 9.0" W x 8.0" D and 20 lbs limit.

### 13.0 AUTOMATIC VOLTAGE REGULATOR 08

- 13.1 This AVR shall have the same technical specification as Item 00067, with the exception that the electrical requirements for the redundant control power should be rated for 120VAC, 50VA and 125VDC, 30W.

### 14.0 AUTOMATIC VOLTAGE REGULATOR 09

- 14.1 This AVR shall have the same technical specification as Item 00067, with the exception that the electrical requirement for tracking includes external auto-tracking capability between redundant AVR.

### 15.0 AUTOMATIC VOLTAGE REGULATOR 10

- 15.1 This AVR shall have the same technical specification as Item 00067, with the exception that the electrical requirements for the redundant control power should be rated for 120VAC, 50VA and 125VDC, 30W as well as the external auto-tracking capability for tracking between redundant AVR.

### 16.0 LOGISTICS SUPPORT

The offeror shall clearly state and provide a spare parts list for all the line items listed on this SOW. In addition, describe the ability to obtain and provide spare parts for all the line items. Previous experience with Federal supply agencies shall be provided if any. Voltage Regulator components commonality with other navy or commercial marine applications shall be identified.

### 17.0 IN SERVICE FIELD ENGINEER

In-service field engineering support will be require during the installation and commissioning phase for each of the line items listed on the SOW. The in service field engineers will be require to work weekdays, overtime, and weekends as pertain necessary during testing.

### 18.0 Warranty

Contractors are to provide their warranty terms and conditions for each item.

### 19.0 CONTRACT DATA REQUIREMENTS LIST (CDRL) ATTACHMENT 1

- 19.1 Logistics Management Information (LMI) Summary, Engineering Data for Provisioning (EDFP) (Digital). (CDRL L001A)
- 19.2 Logistics Management Information (LMI) Summary, Engineering Data for Provisioning (EDFP) (Hard Copy). (CDRL L001B)
- 19.3 Logistics Management Information (LMI) Summery, Engineering Data for Provisioning (EDFP) for Interim Support Data. (CDRL L001C)
- 19.4 Logistics Management Information (LMI) Supportability Analyses Summary (SAS), System Configuration Provisioning List (SCPL). (CDRL L002A)
- 19.5 Logistics Management Information (LMI) Supportability Analyses Summary (SAS), Provisioning Parts List (PPL). (CDRL L002B)
- 19.6 Logistics Management Information (LMI) Supportability Analyses Summary (SAS), Long Lead Time Items List (LLTIL). (CDRL L002C)
- 19.7 Logistics Management Information (LMI) Supportability Analyses Summary (SAS), Interim Support Items List (ISIL). (CDRL L002D)



- 19.8 Logistics Management Information (LMI) Supportability Analyses Summary (SAS), Tools and Test Equipment (TTEL). (CDRL L002E)
  - 19.9 Logistics Management Information (LMI) Supportability Analyses Summary (SAS), Design Change Notice (DCN). (CDRL L002F)
  - 19.10 Logistics Management Information (LMI) Supportability Analyses Summary (SAS), Ship Level Provisioning Parts List (SLPPL). (CDRL L002G)
  - 19.11 Logistics Management Information (LMI) Supportability Analyses Summary (SAS), Component Identification Data (CID) for statement of prior submission (SPS). (CDRL L002H)
  - 19.12 Logistics Management Information (LMI) Supportability Analyses Summary (SAS), Component Identification Data for Advance RIC. (CDRL L002I)
  - 19.13 Commercial off-the-shelf (COTS) Manuals, Supplemental Engineering Data for Provisioning. (CDRL L003A)
  - 19.14 Conference Agenda, Provisioning Conferences. (CDRL L004A)
  - 19.15 Conference Minutes, Provisioning Conference Minutes. (CDRL L005A)
  - 19.16 Planned Maintenance System, Master system and subsystem index. (CDRL L006A)
  - 19.17 Planned Maintenance System, Functional Failure Analysis (FFA). (CDRL L006B)
  - 19.18 Planned Maintenance System, Failure Modes and effects analysis (FMEA). (CDRL L006C)
  - 19.19 Commercial off-the-shelf (COTS) Manuals and Associated Supplemental Data, Commercial Technical Manual. (CDRL L007A)
- 20.0 Referenced Documents
- a. MIL-R-2729D(SH) Regulator-Exciter Systems, Voltage, A.C. Generator, Naval Shipboard Use, 28th January 1992
  - b. MIL-STD-1399 Section 300A Interface Standard for Shipboard Systems, Electric Power, Alternating Current (Metric), 13 October 1987

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001	DUAL AUTOMATIC VOLTAGE REGULATOR YEAR 1 FOB: Destination FFP	25	Each		
				NET AMT	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002	POWER CURRENT TRANSFORMER YEAR 1 FOB: Destination FFP	32	Each		
				NET AMT	_____

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003	RESERVOIR ASSEMBLY YEAR 1 FOB: Destination FFP	20	Each		
				NET AMT	_____

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0004	MANUAL VOLTAGE REGULATOR YEAR 1 FOB: Destination FFP	20	Each		
				NET AMT	_____

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005	AUTOMATIC VOLTAGE REGULATOR 01 YEAR 1 FOB: Destination FFP	20	Each		

NET AMT

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0006	AUTOMATIC VOLTAGE REGULATOR 02 YEAR 1 FOB: Destination FFP	10	Each		

NET AMT

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0007	DUAL VOLTAGE REGULATORS YEAR 2 FOB: Destination FFP	25	Each		

NET AMT

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0008	POWER CURRENT TRANSFORMER YEAR 2 FOB: Destination FFP	32	Each		
				NET AMT	<hr/>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0009	RESERVOIR ASSEMBLY YEAR 2 FOB: Destination FFP	20	Each		
				NET AMT	<hr/>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0010	MANUAL VOLTAGE REGULATOR YEAR 2 FOB: Destination FFP	20	Each		
				NET AMT	<hr/>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0011	AUTOMATIC VOLTAGE REGULATOR 01 YEAR 2 FOB: Destination FFP	20	Each		
				NET AMT	<hr/>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0012	AUTOMATIC VOLTAGE REGULATOR 02 Year 2 FOB: Destination FFP	10	Each		
				NET AMT	<hr/>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0013	AUTOMATIC DUAL VOLTAGE REGULATORS YEAR 3 FOB: Destination FFP	25	Each		
				NET AMT	<hr/>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0014	POWER CURRENT TRANSFORMER YEAR 3 FOB: Destination FFP	32	Each		
				NET AMT	_____

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0015	RESERVOIR ASSEMBLY YEAR 3 FOB: Destination FFP	20	Each		
				NET AMT	_____

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0016	MANUAL VOLTAGE REGULATOR YEAR 3 FOB: Destination FFP	20	Each		
				NET AMT	_____

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0017	AUTOMATIC VOLTAGE REGULATOR 01 YEAR 3 FOB: Destination FFP	20	Each		
				NET AMT	_____

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0018	AUTOMATIC VOLTAGE REGULATOR 02 Year 3 FOB: Destination FFP	10	Each		
				NET AMT	_____

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0019	AUTOMATIC DUAL VOLTAGE REGULATORS YEAR 4 FOB: Destination FFP	25	Each		
				NET AMT	_____

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0020	POWER CURRENT TRANSFORMER YEAR 4 FOB: Destination FFP	32	Each		

NET AMT

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0021	RESERVOIR ASSEMBLY YEAR 4 FOB: Destination FFP	20	Each		

NET AMT

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0022	MANUAL VOLTAGE REGULATOR YEAR 4 FOB: Destination FFP	20	Each		

NET AMT



ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0023	AUTOMATIC VOLTAGE REGULATOR 01 YEAR 4 FOB: Destination FFP	20	Each		
				NET AMT	_____

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0024	AUTOMATIC VOLTAGE REGULATOR 02 Year 4 FOB: Destination FFP	10	Each		
				NET AMT	_____

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0025	AUTOMATIC DUAL VOLTAGE REGULATORS YEAR 5 FOB: Destination FFP	25	Each		
				NET AMT	_____

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0026	POWER CURRENT TRANSFORMER YEAR 5 FOB: Destination FFP	32	Each		

NET AMT

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0027	RESERVOIR ASSEMBLY YEAR 5 FOB: Destination FFP	20	Each		

NET AMT

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0028	MANUAL VOLTAGE REGULATOR YEAR 5 FOB: Destination FFP	20	Each		

NET AMT

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0029	AUTOMATIC VOLTAGE REGULATOR 01 Year 5 FOB: Destination FFP	20	Each		

NET AMT

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0030	AUTOMATIC VOLTAGE REGULATOR 02 Year 5 FOB: Destination FFP	10	Each		

NET AMT

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0031	IN-SERVICE FIELD ENGINEER SUPPORT Year 1 FOB: Destination FFP	600	Hours		

NET AMT

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0032		600	Hours		
	IN-SERVICE FIELD ENGINEER SUPPORT				
	Year 2				
	FOB: Destination				
	FFP				
				NET AMT	_____

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0033		600	Hours		
	IN-SERVICE FIELD ENGINEER SUPPORT				
	Year 3				
	FOB: Destination				
	FFP				
				NET AMT	_____

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0034		600	Hours		
	IN-SERVICE FIELD ENGINEER SUPPORT				
	Year 4				
	FOB: Destination				
	FFP				
				NET AMT	_____

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0035	IN-SERVICE FIELD ENGINEER SUPPORT Year 5 FOB: Destination FFP	600	Hours		
				NET AMT	<hr/>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0036	Contract Data Requirements List DD 1423 FOB: Destination FFP	1	Lot		<b>NOT SEPERATELY PRICED</b>
				NET AMT	<hr/>

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0037	TRAVEL FOB: Destination FFP	1	Lot		<b>NOT TO EXCEED \$195,500.00</b>
				NET AMT	<hr/>

**INSPECTION AND ACCEPTANCE TERMS**

Supplies/services will be inspected at Destination by the Naval Surface Warfare Center, Carderock Division, Philadelphia PA, Code 9370, Andy Guo 215-897-8543.

#### DELIVERY INFORMATION

Delivery shall be specified in individual Delivery Orders. Delivery will be required 60 days after receipt of order (ARO).

##### Ship To Address

Naval Surface Warfare Center Carderock Division Philadelphia  
Building 542, Shipping and Receiving  
1601 Langley Ave  
Philadelphia, PA 19112-5083  
Mark fo ANDY GUO, CODE 937

#### PACKAGING AND MARKING INFORMATION

The equipment to be furnished shall be preserved, packaged in accordance with the contractor's standard practice in a manner to prevent deterioration ,damage and to ensure arrival at destination in a satisfactory condition.

#### CLAUSES INCORPORATED BY FULL TEXT

52.209-9 Updates of Publicly Available Information Regarding Responsibility Matters (JAN 2011)

(a) The Contractor shall update the information in the Federal Awardee Performance and Integrity Information System (FAPIS) on a semi-annual basis, throughout the life of the contract, by posting the required information in the Central Contractor Registration database at <http://www.ccr.gov>.

(b)(1) The Contractor will receive notification when the Government posts new information to the Contractor's record.

(2) The Contractor will have an opportunity to post comments regarding information that has been posted by the Government. The comments will be retained as long as the associated information is retained, i.e., for a total period of 6 years. Contractor comments will remain a part of the record unless the Contractor revises them.

(3)(i) Public requests for system information posted prior to April 15, 2011, will be handled under Freedom of Information Act procedures, including, where appropriate, procedures promulgated under E.O. 12600.

(ii) As required by section 3010 of Public Law 111-212, all information posted in FAPIS on or after April 15, 2011, except past performance reviews, will be publicly available.

(End of clause)

#### CLAUSES INCORPORATED BY FULL TEXT

52.212-1 INSTRUCTIONS TO OFFERORS--COMMERCIAL ITEMS (JUN 2008)

(a) North American Industry Classification System (NAICS) code and small business size standard. The NAICS code and small business size standard for this acquisition appear in Block 10 of the solicitation cover sheet (SF 1449). However, the small business size standard for a concern which submits an offer in its own name, but which proposes to furnish an item which it did not itself manufacture, is 500 employees.

(b) Submission of offers. Submit signed and dated offers to the office specified in this solicitation at or before the exact time specified in this solicitation. Offers may be submitted on the SF 1449, letterhead stationery, or as otherwise specified in the solicitation. As a minimum, offers must show--

- (1) The solicitation number;
- (2) The time specified in the solicitation for receipt of offers;
- (3) The name, address, and telephone number of the offeror;
- (4) A technical description of the items being offered in sufficient detail to evaluate compliance with the requirements in the solicitation. This may include product literature, or other documents, if necessary;
- (5) Terms of any express warranty;
- (6) Price and any discount terms;
- (7) "Remit to" address, if different than mailing address;
- (8) A completed copy of the representations and certifications at FAR 52.212-3 (see FAR 52.212-3(b) for those representations and certifications that the offeror shall complete electronically);
- (9) Acknowledgment of Solicitation Amendments;
- (10) Past performance information, when included as an evaluation factor, to include recent and relevant contracts for the same or similar items and other references (including contract numbers, points of contact with telephone numbers and other relevant information);

### **(1) TECHNICAL PROPOSAL**

The technical proposal should be written so that management and engineering oriented personnel can make a thorough evaluation and arrive at a sound determination as to whether the proposal meets the requirements of this solicitation. To this end, the technical proposal shall be so specific, detailed and complete as to clearly and fully demonstrate that the prospective contractor has a thorough understanding of the technical requirements contained in the specification.

Statements such as "the offeror understands," "will comply with the specifications," "standard procedures will be employed," "well known techniques will be used" and general paraphrasing are considered inadequate. The technical proposal must provide details demonstrating how the offeror's proposed equipment will conform to the features identified in the specification.

The technical proposal shall not contain any reference to cost and any information of interest to technical reviewers shall be contained in the technical proposal in sufficient detail so that the offeror's understanding of the scope of the work may be adequately evaluated. The technical proposal shall be page numbered, contain a table of contents, be organized in the following sections, and shall address in detail the following information:

By submitting its signed offer without taking any exceptions, the offeror will be indicating its intent to fully comply with the technical requirements. Offerors that request changes to any of the requirements terms and conditions or otherwise indicate other than full compliance, shall provide details and justification for the change. If an explanation is not provided, the offeror will be considered to be non-compliant and may be eliminated from consideration for award at any time prior to award, including elimination from the competitive range.

**Section 1, Introduction;** This Section shall provide any necessary background information and an overview of the proposal which the offeror believes will assist in the understanding and accurate evaluation of the proposal.

## **Section 2-Technical Proposal**

**(FACTOR A) Design and Performance Characteristics;** The offeror shall address the following technical elements for the proposed Voltage Regulators:

**Sub-factor 1 *Detailed Requirement Compliance Matrix*;** The proposal shall contain sufficient technical details and a compliance matrix or spreadsheet for each of the line items listed in the Specification to show how all of the technical requirements contained in the specification will be met. This matrix or spreadsheet shall provide details on all of the components being offered.

**Sub-factor 2 *Performance Characteristics*;** Inputs & outputs of the Voltage Regulators performance requirements and features with all functions shall be provided to demonstrate that the proposed Voltage Regulators will meet the performance requirements under the conditions defined in the specification.

**Sub-factor 3 *Ship Interface Design*;** A general arrangement drawing of each of the line items stated on the specification shall also be provided. The general arrangement drawing shall indicate overall system and unit dimensions, weights, maintenance accessibility, and ship interface requirements.

**(FACTOR B) Life cycle maintenance costs:** Provide the maintenance costs for 1 year of operation. The maintenance information will include scheduled maintenance and component overhaul times with a projected service life. The scheduled maintenance information will include the projected preventative/scheduled maintenance required to ensure all the components listed in the specification operate satisfactory. This shall include the estimated cost to maintain the Voltage Regulators, power current transformers, manual voltage regulators, etc. and other required preventative or operational maintenance tasks. The frequency and duration of such maintenance shall be clearly defined. Data including mean time between failures, mean time to repair, and mean time for scheduled maintenance will be provided for all the line items listed on the specification. The life cycle cost schedule will indicate the material costs and labor hours required to maintain the line items over a 1 year period. The labor hours for maintenance tasks that can be accomplished by ships force will be listed separately from tasks that would be beyond the capability of ships force. The level of expertise needed to accomplish tasks assigned to ships force shall be provided.

**(FACTOR C) Past Performance;** The past performance section shall include information about the offeror and proposed subcontractors, if applicable, according to the following instructions. The offeror shall list their five (5) most recent contracts and/or subcontracts, awarded for similar supplies, completed within the last three (3) years, and identify in specific detail for each why or how it is considered that this effort is relevant or similar to the effort required by this solicitation. Contracts may include those entered into with the Federal Government, agencies of state or local governments, and commercial customers.

The following detailed information shall be submitted for each of the five contracts:

Name of Customer (Federal Contracting Agency, Local Government, Commercial Customer, etc.)  
Contract/Subcontract Number  
Contract Type



**Total Contract Value**

**Customer Point of Contact (List two names, phone numbers and a fax number)**

**Relevant or similar effort description of product**

**Period of Performance**

**Verification inspections performed**

The offeror shall provide information on problems (show cause, cure notice, termination for default, quality issues, defective pricing issues, litigation etc.) encountered on these contracts and corrective actions taken to resolve these problems.

The following elements shall be addressed in narrative form:

***Quality of Product.*** Compliance with contract requirements, accuracy of reports, appropriateness of personnel, technical excellence.

***Timeliness of Performance.*** Met interim milestones, reliable, responsive to technical issues, completed on time.

***Customer Satisfaction.*** Satisfaction of end users with the contractor's service.

***Quality Awards.*** The offeror should describe any quality awards or certifications that indicate the offeror possesses a high quality process for developing and producing the product. Identify what segment of the company received the award or certification. Describe when the award or certification was bestowed. If the award or certification is over three years old, present evidence that the qualifications still apply.

**(FACTOR D) Corporate Experience/Resources;** The offeror shall describe experience in designing and manufacturing Voltage Regulators used in navy or commercial marine shipboard applications. The offeror shall provide a listing of manufacturing, production, technical equipment, facilities, and other resources, or how they will be obtained for use in this contract and identify how they will be used to support fabrication of the voltage regulators and all the test requirements identified in the specification. The offeror shall describe its quality or inspection system, processes and/or procedures that will be used to ensure compliance with the requirements contained in the specification. This will include the means, methods and controls to be employed during purchasing, manufacturing, production, assembly, testing and inspection of the producer.

(12) If the offer is not submitted on the SF 1449, include a statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation. Offers that fail to furnish required representations or information, or reject the terms and conditions of the solicitation may be excluded from consideration.

(c) Period for acceptance of offers. The offeror agrees to hold the prices in its offer firm for 30 calendar days from the date specified for receipt of offers, unless another time period is specified in an addendum to the solicitation.

(d) Product samples. When required by the solicitation, product samples shall be submitted at or prior to the time specified for receipt of offers. Unless otherwise specified in this solicitation, these samples shall be submitted at no expense to the Government, and returned at the sender's request and expense, unless they are destroyed during preaward testing.

(e) Multiple offers. Offerors are encouraged to submit multiple offers presenting alternative terms and conditions or commercial items for satisfying the requirements of this solicitation. Each offer submitted will be evaluated separately.

(f) Late submissions, modifications, revisions, and withdrawals of offers:

(1) Offerors are responsible for submitting offers, and any modifications, revisions, or withdrawals, so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is specified in the solicitation, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that offers or revisions are due.

(2)(i) Any offer, modification, revision, or withdrawal of an offer received at the Government office designated in the solicitation after the exact time specified for receipt of offers is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would not unduly delay the acquisition; and--

(A) If it was transmitted through an electronic commerce method authorized by the solicitation, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of offers; or

(B) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of offers and was under the Government's control prior to the time set for receipt of offers; or

(C) If this solicitation is a request for proposals, it was the only proposal received.

(ii) However, a late modification of an otherwise successful offer, that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.

(3) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the offer wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

(4) If an emergency or unanticipated event interrupts normal Government processes so that offers cannot be received at the Government office designated for receipt of offers by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation or other notice of an extension of the closing date, the time specified for receipt of offers will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.

(5) Offers may be withdrawn by written notice received at any time before the exact time set for receipt of offers. Oral offers in response to oral solicitations may be withdrawn orally. If the solicitation authorizes facsimile offers, offers may be withdrawn via facsimile received at any time before the exact time set for receipt of offers, subject to the conditions specified in the solicitation concerning facsimile offers. An offer may be withdrawn in person by an offeror or its authorized representative if, before the exact time set for receipt of offers, the identity of the person requesting withdrawal is established and the person signs a receipt for the offer.

(g) Contract award (not applicable to Invitation for Bids). The Government intends to evaluate offers and award a contract without discussions with offerors. Therefore, the offeror's initial offer should contain the offeror's best terms from a price and technical standpoint. However, the Government reserves the right to conduct discussions if later determined by the Contracting Officer to be necessary. The Government may reject any or all offers if such action is in the public interest; accept other than the lowest offer; and waive informalities and minor irregularities in offers received.

(h) Multiple awards. The Government may accept any item or group of items of an offer, unless the offeror qualifies the offer by specific limitations. Unless otherwise provided in the Schedule, offers may not be submitted for quantities less than those specified. The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit prices offered, unless the offeror specifies otherwise in the offer.

(i) Availability of requirements documents cited in the solicitation. (1)(i) The GSA Index of Federal Specifications, Standards and Commercial Item Descriptions, FPMR Part 101-29, and copies of specifications, standards, and

commercial item descriptions cited in this solicitation may be obtained for a fee by submitting a request to--GSA Federal Supply Service Specifications Section, Suite 8100, 470 East L'Enfant Plaza, SW, Washington, DC 20407, Telephone (202) 619-8925, Facsimile (202) 619-8978.

(ii) If the General Services Administration, Department of Agriculture, or Department of Veterans Affairs issued this solicitation, a single copy of specifications, standards, and commercial item descriptions cited in this solicitation may be obtained free of charge by submitting a request to the addressee in paragraph (i)(1)(i) of this provision. Additional copies will be issued for a fee.

(2) Most unclassified Defense specifications and standards may be downloaded from the following ASSIST websites:

(i) ASSIST (<http://assist.daps.dla.mil>).

(ii) Quick Search (<http://assist.daps.dla.mil/quicksearch>).

(iii) ASSISTdocs.com (<http://assistdocs.com>).

(3) Documents not available from ASSIST may be ordered from the Department of Defense Single Stock Point (DoDSSP) by--

(i) Using the ASSIST Shopping Wizard (<http://assist.daps.dla.mil/wizard>);

(ii) Phoning the DoDSSP Customer Service Desk (215) 697-2179, Mon-Fri, 0730 to 1600 EST; or

(iii) Ordering from DoDSSP, Building 4, Section D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Telephone (215) 697-2667/2179, Facsimile (215) 697-1462.

(4) Nongovernment (voluntary) standards must be obtained from the organization responsible for their preparation, publication, or maintenance.

(j) Data Universal Numbering System (DUNS) Number. (Applies to all offers exceeding \$3,000, and offers of \$3,000 or less if the solicitation requires the Contractor to be registered in the Central Contractor Registration (CCR) database. The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" or "DUNS +4" followed by the DUNS or DUNS +4 number that identifies the offeror's name and address. The DUNS +4 is the DUNS number plus a 4-character suffix that may be assigned at the discretion of the offeror to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see FAR Subpart 32.11) for the same concern. If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one. An offeror within the United States may contact Dun and Bradstreet by calling 1-866-705-5711 or via the internet at <http://fedgov.dnb.com/webform>. An offeror located outside the United States must contact the local Dun and Bradstreet office for a DUNS number. The offeror should indicate that it is an offeror for a Government contract when contacting the local Dun and Bradstreet office.

(k) Central Contractor Registration. Unless exempted by an addendum to this solicitation, by submission of an offer, the offeror acknowledges the requirement that a prospective awardee shall be registered in the CCR database prior to award, during performance and through final payment of any contract resulting from this solicitation. If the Offeror does not become registered in the CCR database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the next otherwise successful registered Offeror. Offerors may obtain information on registration and annual confirmation requirements via the Internet at <http://www.ccr.gov> or by calling 1-888-227-2423 or 269-961-5757.

(l) Debriefing. If a post-award debriefing is given to requesting offerors, the Government shall disclose the following information, if applicable:

- (1) The agency's evaluation of the significant weak or deficient factors in the debriefed offeror's offer.
  - (2) The overall evaluated cost or price and technical rating of the successful and the debriefed offeror and past performance information on the debriefed offeror.
  - (3) The overall ranking of all offerors, when any ranking was developed by the agency during source selection.
  - (4) A summary of the rationale for award;
  - (5) For acquisitions of commercial items, the make and model of the item to be delivered by the successful offeror.
  - (6) Reasonable responses to relevant questions posed by the debriefed offeror as to whether source-selection procedures set forth in the solicitation, applicable regulations, and other applicable authorities were followed by the agency.
- (End of provision)

#### 52.212-2 EVALUATION--COMMERCIAL ITEMS (JAN 1999)

- (a) The Government will award a contract resulting from this solicitation to the responsible offeror whose offer conforming to the solicitation will be most advantageous to the Government, price and other factors considered. The following factors shall be used to evaluate offers:

#### **(1) PROPOSAL EVALUATION CRITERIA**

FACTOR A- Design and Performance Characteristics/Technical Capability: The design of each offeror will be evaluated to determine the offerors ability to meet the specification requirements. A proven design will receive greater weight than an unproven design. Design risk will be a significant consideration in this factor.

Sub-factor 1 Detailed Compliance Matrix - Evaluation of the matrix or spreadsheet for each of the line items listed in the specifications will be based on the technical details the offeror provides as compared to/with the technical specifications.

Sub-factor 2 Performance Characteristics – Evaluation of the performance characteristics will be based on the inputs, outputs, as well as the features of the Voltage Regulators. Inputs and outputs of the Voltage Regulators which provides PLC compatible contacts, relays, or additional accessory inputs for remote control capability and any additional features such as generator protection functions build into the Voltage Regulator, etc.

Sub-factor 3 Shipboard Interface - Size of the Voltage Regulators is a concern since disruption of areas adjacent to the engine space are very important to the ship's mission, and the voltage regulators must fit within the existing spaces. The shipboard interface aspect of the proposal will be evaluated for the least impact to the ship, with regards to the following criteria:

- a. Size- Ability to fit into space stated in the specification. Greater value will be given to the voltage regulators that cause no disruption to adjacent spaces and have adequate space for maintenance and repair.
- b. Weight- System overall weight, with lowest overall weight most desirable.
- c. Interface Connections- Requirements for interfacing cabling to the Voltage Regulators and the rest of the distribution system.

FACTOR B- Life Cycle Maintenance- Evaluation of the maintenance information will include scheduled maintenance timelines with a projected life for the Voltage Regulators. The scheduled maintenance information will include projected preventative/scheduled maintenance required to ensure the Voltage Regulators operate satisfactorily. The frequency and duration of such maintenance shall be clearly defined. Data including mean time

between failures or field parts repair rates, meantime to repair, mean time to restart after maintenance, and mean time for scheduled maintenance will be evaluated. All cost associated with maintenance shall also be provided.

FACTOR C- Past Performance - Evaluation of past performance information will include, but not be limited to, relevance and extent of previous contracts, quality and conformance of product/services to specifications, timely delivery, rework of minor and major components, and customer satisfaction. Information utilized will be obtained from contractor references as well as any other sources that may have relevant information. Contractor references that cannot be contacted will not be considered. An offer with no relevant past performance history, although neither losing or receiving credit, may not represent the most advantageous proposal to the Government.

FACTOR D- Corporate Experience/Resources - Manufacturing, production, technical equipment, facilities, and other resources, or the ability to obtain them for use in performance of this contract will be evaluated. The offeror's quality or inspection system, processes and/or procedures it will use to ensure compliance with the requirements contained in the Technical Specification will be evaluated. This will include the means, methods, and controls to be employed during purchasing, manufacturing, production, assembly, testing and inspection of the producer.

*(2) Cost or Price Proposal.*

(i) Although cost or price is not scored, numerically weighted, or combined with the other evaluation factors to establish a merit rating, it will be evaluated for magnitude and realism. The determination of the magnitude of the cost proposal will be based on the total of all proposed costs. In those evaluations where all other evaluation factors, when combined, are significantly more important than cost or price, the degree of importance of the cost or price factor will increase with the degree of equality of the proposals in relation to the other factors on which selection is to be based.

(ii) Proposals which are unrealistic in terms of technical or schedule commitments or unrealistically high or low in cost may be deemed reflective of an inherent lack of technical competence, or indicative of a failure to comprehend the complexity and risks of the proposed work, and may be grounds for rejection of the proposal. If the proposed contract requires the delivery of data, the quality of organization and writing reflected in the proposal will be considered to be an indication of the quality of organization and writing which would be prevalent in the proposed deliverable data. Subjective judgment on the part of the Government evaluators is implicit in the entire process. Throughout the evaluation, the Government will consider "correction potential" when a deficiency is identified.

**Evaluation Factors.** The evaluation factors and significant subfactors are listed below in both descending order and degree of relative importance.

Factor A-Design and Performance Characteristics is the most important factor

Sub-factor 1. Detailed Requirement Matrix is more important than Sub-factor 2-Performance Characteristics, which is more important than Sub-factor 3-Ship-Interface Design.

Factor C-Past Performance is less important than Factor A-Design and Performance Characteristics, but more important than Factor B-Life Cycle Maintenance.

Factor B-Life Cycle Maintenance is more important than Factor D-Corporate Experience, which is the least important factor.

(b) A written notice of award or acceptance of an offer, mailed or otherwise furnished to the successful offeror within the time for acceptance specified in the offer, shall result in a binding contract without further action by either party. Before the offer's specified expiration time, the Government may accept an offer (or part of an offer), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award.

(End of provision)

## 52.212-3 OFFEROR REPRESENTATIONS AND CERTIFICATIONS--COMMERCIAL ITEMS (JAN 2011)

An offeror shall complete only paragraph (b) of this provision if the offeror has completed the annual representations and certifications electronically at <http://orca.bpn.gov>. If an offeror has not completed the annual representations and certifications electronically at the ORCA website, the offeror shall complete only paragraphs (c) through (o) of this provision.

(a) Definitions. As used in this provision --

"Emerging small business" means a small business concern whose size is no greater than 50 percent of the numerical size standard for the NAICS code designated.

"Forced or indentured child labor" means all work or service-

(1) Exacted from any person under the age of 18 under the menace of any penalty for its nonperformance and for which the worker does not offer himself voluntarily; or

(2) Performed by any person under the age of 18 pursuant to a contract the enforcement of which can be accomplished by process or penalties.

Inverted domestic corporation means a foreign incorporated entity which is treated as an inverted domestic corporation under 6 U.S.C. 395(b), i.e., a corporation that used to be incorporated in the United States, or used to be a partnership in the United States, but now is incorporated in a foreign country, or is a subsidiary whose parent corporation is incorporated in a foreign country, that meets the criteria specified in 6 U.S.C. 395(b), applied in accordance with the rules and definitions of 6 U.S.C. 395(c).

Manufactured end product means any end product in Federal Supply Classes (FSC) 1000-9999, except--

- (1) FSC 5510, Lumber and Related Basic Wood Materials;
- (2) Federal Supply Group (FSG) 87, Agricultural Supplies;
- (3) FSG 88, Live Animals;
- (4) FSG 89, Food and Related Consumables;
- (5) FSC 9410, Crude Grades of Plant Materials;
- (6) FSC 9430, Miscellaneous Crude Animal Products, Inedible;
- (7) FSC 9440, Miscellaneous Crude Agricultural and Forestry Products;
- (8) FSC 9610, Ores;
- (9) FSC 9620, Minerals, Natural and Synthetic; and
- (10) FSC 9630, Additive Metal Materials.

Place of manufacture means the place where an end product is assembled out of components, or otherwise made or processed from raw materials into the finished product that is to be provided to the Government. If a product is disassembled and reassembled, the place of reassembly is not the place of manufacture.

Restricted business operations means business operations in Sudan that include power production activities, mineral extraction activities, oil-related activities, or the production of military equipment, as those terms are defined in the Sudan Accountability and Divestment Act of 2007 (Pub. L. 110-174). Restricted business operations do not include business operations that the person (as that term is defined in Section 2 of the Sudan Accountability and Divestment Act of 2007) conducting the business can demonstrate--

- (1) Are conducted under contract directly and exclusively with the regional government of southern Sudan;
- (2) Are conducted pursuant to specific authorization from the Office of Foreign Assets Control in the Department of the Treasury, or are expressly exempted under Federal law from the requirement to be conducted under such authorization;
- (3) Consist of providing goods or services to marginalized populations of Sudan;
- (4) Consist of providing goods or services to an internationally recognized peacekeeping force or humanitarian organization;
- (5) Consist of providing goods or services that are used only to promote health or education; or
- (6) Have been voluntarily suspended.

Service-disabled veteran-owned small business concern--

(1) Means a small business concern--

- (i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and
- (ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

"Small business concern" means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and size standards in this solicitation.

Veteran-owned small business concern means a small business concern--

- (1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and
- (2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned business concern" means a concern which is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

"Women-owned small business concern" means a small business concern--

(1) That is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of its stock is owned by one or more women; or

(2) Whose management and daily business operations are controlled by one or more women.

(b) (1) Annual Representations and Certifications. Any changes provided by the offeror in paragraph (b)(2) of this provision do not automatically change the representations and certifications posted on the Online Representations and Certifications Application (ORCA) website.

(2) The offeror has completed the annual representations and certifications electronically via the ORCA website at <http://orca.bpn.gov>. After reviewing the ORCA database information, the offeror verifies by submission of this offer that the representations and certifications currently posted electronically at FAR 52.212-3, Offeror Representations and Certifications--Commercial Items, have been entered or updated in the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201), except for paragraphs -----.

(Offeror to identify the applicable paragraphs at (c) through (o) of this provision that the offeror has completed for the purposes of this solicitation only, if any.)

These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.]

(c) Offerors must complete the following representations when the resulting contract will be performed in the United States or its outlying areas. Check all that apply.

(1) Small business concern. The offeror represents as part of its offer that it ( ) is, ( ) is not a small business concern.

(2) Veteran-owned small business concern. (Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.) The offeror represents as part of its offer that it ( ) is, ( ) is not a veteran-owned small business concern.

(3) Service-disabled veteran-owned small business concern. (Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (c)(2) of this provision.) The offeror represents as part of its offer that it ( ) is, ( ) is not a service-disabled veteran-owned small business concern.

(4) Small disadvantaged business concern. (Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.) The offeror represents, for general statistical purposes, that it ( ) is, ( ) is not a small disadvantaged business concern as defined in 13 CFR 124.1002.

(5) Women-owned small business concern. (Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.) The offeror represents that it ( ) is, ( ) is not a women-owned small business concern.



Note: Complete paragraphs (c)(6) and (c)(7) only if this solicitation is expected to exceed the simplified acquisition threshold.

(6) Women-owned business concern (other than small business concern). (Complete only if the offeror is a women-owned business concern and did not represent itself as a small business concern in paragraph (c)(1) of this provision.) The offeror represents that it ( ) is, a women-owned business concern.

(7) Tie bid priority for labor surplus area concerns. If this is an invitation for bid, small business offerors may identify the labor surplus areas in which costs to be incurred on account of manufacturing or production (by offeror or first-tier subcontractors) amount to more than 50 percent of the contract price:

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(8) Small Business Size for the Small Business Competitiveness Demonstration Program and for the Targeted Industry Categories under the Small Business Competitiveness Demonstration Program. (Complete only if the offeror has represented itself to be a small business concern under the size standards for this solicitation.)

(i) (Complete only for solicitations indicated in an addendum as being set-aside for emerging small businesses in one of the designated industry groups (DIGs).) The offeror represents as part of its offer that it ( ) is, ( ) is not an emerging small business.

(ii) (Complete only for solicitations indicated in an addendum as being for one of the targeted industry categories (TICs) or designated industry groups (DIGs).) Offeror represents as follows:

(A) Offeror's number of employees for the past 12 months (check the Employees column if size standard stated in the solicitation is expressed in terms of number of employees); or

(B) Offeror's average annual gross revenue for the last 3 fiscal years (check the Average Annual Gross Number of Revenues column if size standard stated in the solicitation is expressed in terms of annual receipts).

(Check one of the following):

Average Annual

Number of Employees Gross Revenues

\_\_\_ 50 or fewer \_\_\_ \$1 million or less

\_\_\_ 51 - 100 \_\_\_ \$1,000,001 - \$2 million

\_\_\_ 101 - 250 \_\_\_ \$2,000,001 - \$3.5 million

\_\_\_ 251 - 500 \_\_\_ \$3,500,001 - \$5 million

\_\_\_ 501 - 750 \_\_\_ \$5,000,001 - \$10 million

\_\_\_ 751 - 1,000 \_\_\_ \$10,000,001 - \$17 million

\_\_\_ Over 1,000 \_\_\_ Over \$17 million

(9) (Complete only if the solicitation contains the clause at FAR 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns or FAR 52.219-25, Small Disadvantaged Business Participation Program-Disadvantaged Status and Reporting, and the offeror desires a benefit based on its disadvantaged status.)

(i) General. The offeror represents that either--

(A) It ( ) is, ( ) is not certified by the Small Business Administration as a small disadvantaged business concern and identified, on the date of this representation, as a certified small disadvantaged business concern in the database maintained by the Small Business Administration (PRO-Net), and that no material change in disadvantaged ownership and control has occurred since its certification, and, where the concern is owned by one or more individuals claiming disadvantaged status, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); or

(B) It ( ) has, ( ) has not submitted a completed application to the Small Business Administration or a Private Certifier to be certified as a small disadvantaged business concern in accordance with 13 CFR 124, Subpart B, and a decision on that application is pending, and that no material change in disadvantaged ownership and control has occurred since its application was submitted.

(ii) Joint Ventures under the Price Evaluation Adjustment for Small Disadvantaged Business Concerns. The offeror represents, as part of its offer, that it is a joint venture that complies with the requirements in 13 CFR 124.1002(f) and that the representation in paragraph (c)(9)(i) of this provision is accurate for the small disadvantaged business concern that is participating in the joint venture. (The offeror shall enter the name of the small disadvantaged business concern that is participating in the joint venture: \_\_\_\_\_.)

(10) HUBZone small business concern. (Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.) The offeror represents, as part of its offer, that--

(i) It [squ] is, [squ] is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material changes in ownership and control, principal office, or HUBZone employee percentage have occurred since it was certified in accordance with 13 CFR Part 126; and

(ii) It [squ] is, [squ] is not a HUBZone joint venture that complies with the requirements of 13 CFR Part 126, and the representation in paragraph (c)(10)(i) of this provision is accurate for each HUBZone small business concern participating in the HUBZone joint venture. [The offeror shall enter the names of each of the HUBZone small business concerns participating in the HUBZone joint venture: -----.] Each HUBZone small business concern participating in the HUBZone joint venture shall submit a separate signed copy of the HUBZone representation.

(d) Certifications and representations required to implement provisions of Executive Order 11246--

(1) Previous Contracts and Compliance. The offeror represents that--

(i) It ( ) has, ( ) has not, participated in a previous contract or subcontract subject either to the Equal Opportunity clause of this solicitation, the and

(ii) It ( ) has, ( ) has not, filed all required compliance reports.

(2) Affirmative Action Compliance. The offeror represents that--

(i) It ( ) has developed and has on file, ( ) has not developed and does not have on file, at each establishment, affirmative action programs required by rules and regulations of the Secretary of Labor (41 CFR Subparts 60-1 and 60-2), or

(ii) It ( ) has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

(e) Certification Regarding Payments to Influence Federal Transactions (31 U.S.C. 1352). (Applies only if the contract is expected to exceed \$150,000.) By submission of its offer, the offeror certifies to the best of its knowledge and belief that no Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with the award of any resultant contract. If any registrants under the Lobbying Disclosure Act of 1995 have made a lobbying contact on behalf of the offeror with respect to this contract, the offeror shall complete and submit, with its offer, OMB Standard Form LLL, Disclosure of Lobbying Activities, to provide the name of the registrants. The offeror need not report regularly employed officers or employees of the offeror to whom payments of reasonable compensation were made.

(f) Buy American Act Certificate. (Applies only if the clause at Federal Acquisition Regulation (FAR) 52.225-1, Buy American Act --Supplies, is included in this solicitation.)

(1) The offeror certifies that each end product, except those listed in paragraph (f)(2) of this provision, is a domestic end product and that for other than COTS items, the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The offeror shall list as foreign end products those end products manufactured in the United States that do not qualify as domestic end products, i.e., an end product that is not a COTS item and does not meet the component test in paragraph (2) of the definition of "domestic end product." The terms "commercially available off-the-shelf (COTS) item," "component," "domestic end product," "end product," "foreign end product," and "United States" are defined in the clause of this solicitation entitled "Buy American Act--Supplies."

(2) Foreign End Products:

Line Item No.:-----

Country of Origin:-----

(List as necessary)

(3) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(g)(1) *Buy American Act-Free Trade Agreements-Israeli Trade Act Certificate*. (Applies only if the clause at FAR 52.225-3, Buy American Act-Free Trade Agreements-Israeli Trade Act, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(1)(ii) or (g)(1)(iii) of this provision, is a domestic end product and that for other than COTS items, the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The terms "Bahrainian, Moroccan, Omani, or Peruvian end product," "commercially available off-the-shelf (COTS) item," "component," "domestic end product," "end product," "foreign end product," "Free Trade Agreement country," "Free Trade Agreement country end product," "Israeli end product," and "United States" are defined in the clause of this solicitation entitled "Buy American Act-Free Trade Agreements-Israeli Trade Act."

(ii) The offeror certifies that the following supplies are Free Trade Agreement country end products (other than Bahrainian, Moroccan, Omani, or Peruvian end products) or Israeli end products as defined in the clause of this solicitation entitled "Buy American Act--Free Trade Agreements--Israeli Trade Act":

Free Trade Agreement Country End Products (Other than Bahrainian, Moroccan, Omani, or Peruvian End Products) or Israeli End Products:

Line Item No.

-----  
-----  
-----

[List as necessary]

(iii) The offeror shall list those supplies that are foreign end products (other than those listed in paragraph (g)(1)(ii) of this provision) as defined in the clause of this solicitation entitled "Buy American Act-Free Trade Agreements-Israeli Trade Act." The offeror shall list as other foreign end products those end products manufactured in the United States that do not qualify as domestic end products, i.e., an end product that is not a COTS item and does not meet the component test in paragraph (2) of the definition of "domestic end product."

Other Foreign End Products:

Line Item No.	Country of Origin
_____	_____
—	—
_____	_____
—	—
_____	_____
—	—

[List as necessary]

(iv) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(2) *Buy American Act-Free Trade Agreements-Israeli Trade Act Certificate, Alternate I (Jan 2004)*. If Alternate I to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products as defined in the clause of this solicitation entitled "Buy American Act-Free Trade Agreements-Israeli Trade Act":

Canadian End Products:

Line Item No.
_____
—
_____
—
_____
—

[List as necessary]

(3) *Buy American Act-Free Trade Agreements-Israeli Trade Act Certificate, Alternate II (Jan 2004)*. If Alternate II to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products or Israeli end products as defined in the clause of this solicitation entitled "Buy American Act-Free Trade Agreements-Israeli Trade Act":

Canadian or Israeli End Products:

Line Item No.	Country of Origin
_____	_____
—	—
_____	_____
—	—
_____	_____
—	—

[List as necessary]

(4) Trade Agreements Certificate. (Applies only if the clause at FAR 52.225-5, Trade Agreements, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(4)(ii) of this provision, is a U.S.-made or designated country end product, as defined in the clause of this solicitation entitled "Trade Agreements."

(ii) The offeror shall list as other end products those end products that are not U.S.-made or designated country end products.

Other End Products:

Line Item No.	Country of Origin
_____	_____
—	—
_____	_____
—	—
_____	_____
—	—

(List as necessary)

(iii) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25. For line items covered by the WTO GPA, the Government will evaluate offers of U.S.-made or designated country end products without regard to the restrictions of the Buy American Act. The Government will consider for award only offers of U.S.-made or designated country end products unless the Contracting Officer determines that there are no offers for such products or that the offers for such products are insufficient to fulfill the requirements of the solicitation.

(h) Certification Regarding Responsibility Matters (Executive Order 12689). The offeror certifies, to the best of its knowledge and belief, that --

(1) The offeror and/or any of its principals ( ) are, ( ) are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency,

(2) ( ) Have, ( ) have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a Federal, state or local government contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating Federal criminal tax laws, or receiving stolen property; and

(3) ( ) are, ( ) are not presently indicted for, or otherwise criminally or civilly charged by a Government entity with, commission of any of these offenses enumerated in paragraph (h)(2) of this clause; and

(4) ( ) Have, ( ) have not, within a three-year period preceding this offer, been notified of any delinquent Federal taxes in an amount that exceeds \$3,000 for which the liability remains unsatisfied.

(i) Taxes are considered delinquent if both of the following criteria apply:

(A) The tax liability is finally determined. The liability is finally determined if it has been assessed. A liability is not finally determined if there is a pending administrative or judicial challenge. In the case of a judicial challenge to the liability, the liability is not finally determined until all judicial appeal rights have been exhausted.

(B) The taxpayer is delinquent in making payment. A taxpayer is delinquent if the taxpayer has failed to pay the tax liability when full payment was due and required. A taxpayer is not delinquent in cases where enforced collection action is precluded.

(ii) Examples.

(A) The taxpayer has received a statutory notice of deficiency, under I.R.C. Sec. 6212, which entitles the taxpayer to seek Tax Court review of a proposed tax deficiency. This is not a delinquent tax because it is not a final tax liability. Should the taxpayer seek Tax Court review, this will not be a final tax liability until the taxpayer has exercised all judicial appeal rights.

(B) The IRS has filed a notice of Federal tax lien with respect to an assessed tax liability, and the taxpayer has been issued a notice under I.R.C. Sec. 6320 entitling the taxpayer to request a hearing with the IRS Office of Appeals contesting the lien filing, and to further appeal to the Tax Court if the IRS determines to sustain the lien filing. In the course of the hearing, the taxpayer is entitled to contest the underlying tax liability because the taxpayer has had no prior opportunity to contest the liability. This is not a delinquent tax because it is not a final tax liability. Should the taxpayer seek tax court review, this will not be a final tax liability until the taxpayer has exercised all judicial appeal rights.

(C) The taxpayer has entered into an installment agreement pursuant to I.R.C. Sec. 6159. The taxpayer is making timely payments and is in full compliance with the agreement terms. The taxpayer is not delinquent because the taxpayer is not currently required to make full payment.

(D) The taxpayer has filed for bankruptcy protection. The taxpayer is not delinquent because enforced collection action is stayed under 11 U.S.C. 362 (the Bankruptcy Code).

(i) Certification Regarding Knowledge of Child Labor for Listed End Products (Executive Order 13126). (The Contracting Officer must list in paragraph (i)(1) any end products being acquired under this solicitation that are

included in the List of Products Requiring Contractor Certification as to Forced or Indentured Child Labor, unless excluded at 22.1503(b.).

---

(1) Listed End Product

Listed End Product	Listed Countries of Origin:

(2) Certification. (If the Contracting Officer has identified end products and countries of origin in paragraph (i)(1) of this provision, then the offeror must certify to either (i)(2)(i) or (i)(2)(ii) by checking the appropriate block.)

( ) (i) The offeror will not supply any end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product.

( ) (ii) The offeror may supply an end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product. The offeror certifies that it has made a good faith effort to determine whether forced or indentured child labor was used to mine, produce, or manufacture any such end product furnished under this contract. On the basis of those efforts, the offeror certifies that it is not aware of any such use of child labor.

(j) Place of manufacture. (Does not apply unless the solicitation is predominantly for the acquisition of manufactured end products.) For statistical purposes only, the offeror shall indicate whether the place of manufacture of the end products it expects to provide in response to this solicitation is predominantly--

(1) ( ) In the United States (Check this box if the total anticipated price of offered end products manufactured in the United States exceeds the total anticipated price of offered end products manufactured outside the United States); or

(2) ( ) Outside the United States.

(k) Certificates regarding exemptions from the application of the Service Contract Act. (Certification by the offeror as to its compliance with respect to the contract also constitutes its certification as to compliance by its subcontractor if it subcontracts out the exempt services.) (The contracting officer is to check a box to indicate if paragraph (k)(1) or (k)(2) applies.)

( ) (1) Maintenance, calibration, or repair of certain equipment as described in FAR 22.1003-4(c)(1). The offeror ( ) does ( ) does not certify that--

(i) The items of equipment to be serviced under this contract are used regularly for other than Governmental purposes and are sold or traded by the offeror in substantial quantities to the general public in the course of normal business operations;

(ii) The services will be furnished at prices which are, or are based on, established catalog or market prices (see FAR 22.1003-4(c)(2)(ii)) for the maintenance, calibration, or repair of such equipment; and

(iii) The compensation (wage and fringe benefits) plan for all service employees performing work under the contract will be the same as that used for these employees and equivalent employees servicing the same equipment of commercial customers.

( ) (2) Certain services as described in FAR 22.1003-4(d)(1). The offeror ( ) does ( ) does not certify that--

(i) The services under the contract are offered and sold regularly to non-Governmental customers, and are provided by the offeror (or subcontractor in the case of an exempt subcontract) to the general public in substantial quantities in the course of normal business operations;

(ii) The contract services will be furnished at prices that are, or are based on, established catalog or market prices (see FAR 22.1003-4(d)(2)(iii));

(iii) Each service employee who will perform the services under the contract will spend only a small portion of his or her time (a monthly average of less than 20 percent of the available hours on an annualized basis, or less than 20 percent of available hours during the contract period if the contract period is less than a month) servicing the Government contract; and

(iv) The compensation (wage and fringe benefits) plan for all service employees performing work under the contract is the same as that used for these employees and equivalent employees servicing commercial customers.

(3) If paragraph (k)(1) or (k)(2) of this clause applies--

(i) If the offeror does not certify to the conditions in paragraph (k)(1) or (k)(2) and the Contracting Officer did not attach a Service Contract Act wage determination to the solicitation, the offeror shall notify the Contracting Officer as soon as possible; and

(ii) The Contracting Officer may not make an award to the offeror if the offeror fails to execute the certification in paragraph (k)(1) or (k)(2) of this clause or to contact the Contracting Officer as required in paragraph (k)(3)(i) of this clause.

(l) Taxpayer Identification Number (TIN) (26 U.S.C. 6109, 31 U.S.C. 7701). (Not applicable if the offeror is required to provide this information to a central contractor registration database to be eligible for award.)

(1) All offerors must submit the information required in paragraphs (l)(3) through (l)(5) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the Internal Revenue Service (IRS).

(2) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(3) Taxpayer Identification Number (TIN).

( ) TIN: -----.

( ) TIN has been applied for.

( ) TIN is not required because:

( ) Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;

( ) Offeror is an agency or instrumentality of a foreign government;

( ) Offeror is an agency or instrumentality of the Federal Government.

(4) Type of organization.



- ( ) Sole proprietorship;
- ( ) Partnership;
- ( ) Corporate entity (not tax-exempt);
- ( ) Corporate entity (tax-exempt);
- ( ) Government entity (Federal, State, or local);
- ( ) Foreign government;
- ( ) International organization per 26 CFR 1.6049-4;
- ( ) Other -----.
- (5) Common parent.
- ( ) Offeror is not owned or controlled by a common parent;
- ( ) Name and TIN of common parent:

Name -----.

TIN -----.

(m) Restricted business operations in Sudan. By submission of its offer, the offeror certifies that the offeror does not conduct any restricted business operations in Sudan.

(n) Prohibition on Contracting with Inverted Domestic Corporations.

(1) Relation to Internal Revenue Code. A foreign entity that is treated as an inverted domestic corporation for purposes of the Internal Revenue Code at 26 U.S.C. 7874 (or would be except that the inversion transactions were completed on or before March 4, 2003), is also an inverted domestic corporation for purposes of 6 U.S.C. 395 and for this solicitation provision (see FAR 9.108).

(2) Representation. By submission of its offer, the offeror represents that it is not an inverted domestic corporation and is not a subsidiary of one.

(o) Sanctioned activities relating to Iran.

(1) Unless a waiver is granted or an exception applies as provided in paragraph (o)(2) of this provision, by submission of its offer, the offeror certifies that the offeror, or any person owned or controlled by the offeror, does not engage in any activities for which sanctions may be imposed under section 5 of the Iran Sanctions Act of 1996.

(2) The certification requirement of paragraph (o)(1) of this provision does not apply if—

(i) This solicitation includes a trade agreements certification (e.g., 52.212-3(g) or a comparable agency provision); and

(ii) The offeror has certified that all the offered products to be supplied are designated country end products.

(End of provision)

#### 52.212-4 CONTRACT TERMS AND CONDITIONS-- COMMERCIAL ITEMS (JUN 2010)

(a) Inspection/Acceptance. The Contractor shall only tender for acceptance those items that conform to the requirements of this contract. The Government reserves the right to inspect or test any supplies or services that have been tendered for acceptance. The Government may require repair or replacement of nonconforming supplies or reperformance of nonconforming services at no increase in contract price. If repair/replacement or reperformance will not correct the defects or is not possible, the Government may seek an equitable price reduction or adequate consideration for acceptance of nonconforming supplies or services. The Government must exercise its post-acceptance rights (1) within a reasonable time after the defect was discovered or should have been discovered; and (2) before any substantial change occurs in the condition of the item, unless the change is due to the defect in the item.

(b) Assignment. The Contractor or its assignee may assign its rights to receive payment due as a result of performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency in accordance with the Assignment of Claims Act (31 U.S.C. 3727). However, when a third party makes payment (e.g., use of the Governmentwide commercial purchase card), the Contractor may not assign its rights to receive payment under this contract.

(c) Changes. Changes in the terms and conditions of this contract may be made only by written agreement of the parties.

(d) Disputes. This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613). Failure of the parties to this contract to reach agreement on any request for equitable adjustment, claim, appeal or action arising under or relating to this contract shall be a dispute to be resolved in accordance with the clause at FAR 52.233-1, Disputes, which is incorporated herein by reference. The Contractor shall proceed diligently with performance of this contract, pending final resolution of any dispute arising under the contract.

(e) Definitions. The clause at FAR 52.202-1, Definitions, is incorporated herein by reference.

(f) Excusable delays. The Contractor shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of the Contractor and without its fault or negligence such as, acts of God or the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. The Contractor shall notify the Contracting Officer in writing as soon as it is reasonably possible after the commencement or any excusable delay, setting forth the full particulars in connection therewith, shall remedy such occurrence with all reasonable dispatch and shall promptly give written notice to the Contracting Officer of the cessation of such occurrence.

(g) Invoice.

(1) The Contractor shall submit an original invoice and three copies (or electronic invoice, if authorized) to the address designated in the contract to receive invoices. An invoice must include--

(i) Name and address of the Contractor;

(ii) Invoice date and number;

(iii) Contract number, contract line item number and, if applicable, the order number;

(iv) Description, quantity, unit of measure, unit price and extended price of the items delivered;

(v) Shipping number and date of shipment, including the bill of lading number and weight of shipment if shipped on Government bill of lading;

(vi) Terms of any discount for prompt payment offered;

(vii) Name and address of official to whom payment is to be sent;

(viii) Name, title, and phone number of person to notify in event of defective invoice; and

(ix) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.

(x) Electronic funds transfer (EFT) banking information.

(A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.

(B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision, contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration, or 52.232-34, Payment by Electronic Funds Transfer--Other Than Central Contractor Registration), or applicable agency procedures.

(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.

(2) Invoices will be handled in accordance with the Prompt Payment Act (31 U.S.C. 3903) and Office of Management and Budget (OMB) prompt payment regulations at 5 CFR part 1315.

(h) Patent indemnity. The Contractor shall indemnify the Government and its officers, employees and agents against liability, including costs, for actual or alleged direct or contributory infringement of, or inducement to infringe, any United States or foreign patent, trademark or copyright, arising out of the performance of this contract, provided the Contractor is reasonably notified of such claims and proceedings.

(i) Payment.--

(1) Items accepted. Payment shall be made for items accepted by the Government that have been delivered to the delivery destinations set forth in this contract.

(2) Prompt payment. The Government will make payment in accordance with the Prompt Payment Act (31 U.S.C. 3903) and prompt payment regulations at 5 CFR part 1315.

(3) Electronic Funds Transfer (EFT). If the Government makes payment by EFT, see 52.212-5(b) for the appropriate EFT clause.

(4) Discount. In connection with any discount offered for early payment, time shall be computed from the date of the invoice. For the purpose of computing the discount earned, payment shall be considered to have been made on the date which appears on the payment check or the specified payment date if an electronic funds transfer payment is made.

(5) Overpayments. If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall--

(i) Remit the overpayment amount to the payment office cited in the contract along with a description of the overpayment including the--

(A) Circumstances of the overpayment (e.g., duplicate payment, erroneous payment, liquidation errors, date(s) of overpayment);

(B) Affected contract number and delivery order number, if applicable;

(C) Affected contract line item or subline item, if applicable; and

(D) Contractor point of contact.

(ii) Provide a copy of the remittance and supporting documentation to the Contracting Officer.

(6) Interest.

(i) All amounts that become payable by the Contractor to the Government under this contract shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in Section 611 of the Contract Disputes Act of 1978 (Public Law 95-563), which is applicable to the period in which the amount becomes due, as provided in (i)(6)(v) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid.

(ii) The Government may issue a demand for payment to the Contractor upon finding a debt is due under the contract.

(iii) Final decisions. The Contracting Officer will issue a final decision as required by 33.211 if--

(A) The Contracting Officer and the Contractor are unable to reach agreement on the existence or amount of a debt within 30 days;

(B) The Contractor fails to liquidate a debt previously demanded by the Contracting Officer within the timeline specified in the demand for payment unless the amounts were not repaid because the Contractor has requested an installment payment agreement; or

(C) The Contractor requests a deferment of collection on a debt previously demanded by the Contracting Officer (see 32.607-2).

(iv) If a demand for payment was previously issued for the debt, the demand for payment included in the final decision shall identify the same due date as the original demand for payment.

(v) Amounts shall be due at the earliest of the following dates:

(A) The date fixed under this contract.

(B) The date of the first written demand for payment, including any demand for payment resulting from a default termination.

(vi) The interest charge shall be computed for the actual number of calendar days involved beginning on the due date and ending on--

(A) The date on which the designated office receives payment from the Contractor;

(B) The date of issuance of a Government check to the Contractor from which an amount otherwise payable has been withheld as a credit against the contract debt; or

(C) The date on which an amount withheld and applied to the contract debt would otherwise have become payable to the Contractor.

(vii) The interest charge made under this clause may be reduced under the procedures prescribed in 32.608-2 of the Federal Acquisition Regulation in effect on the date of this contract.

(j) Risk of loss. Unless the contract specifically provides otherwise, risk of loss or damage to the supplies provided under this contract shall remain with the Contractor until, and shall pass to the Government upon:

(1) Delivery of the supplies to a carrier, if transportation is f.o.b. origin; or

(2) Delivery of the supplies to the Government at the destination specified in the contract, if transportation is f.o.b. destination.

(k) Taxes. The contract price includes all applicable Federal, State, and local taxes and duties.

(l) Termination for the Government's convenience. The Government reserves the right to terminate this contract, or any part hereof, for its sole convenience. In the event of such termination, the Contractor shall immediately stop all work hereunder and shall immediately cause any and all of its suppliers and subcontractors to cease work. Subject to the terms of this contract, the Contractor shall be paid a percentage of the contract price reflecting the percentage of the work performed prior to the notice of termination, plus reasonable charges the Contractor can demonstrate to the satisfaction of the Government using its standard record keeping system, have resulted from the termination. The Contractor shall not be required to comply with the cost accounting standards or contract cost principles for this purpose. This paragraph does not give the Government any right to audit the Contractor's records. The Contractor shall not be paid for any work performed or costs incurred which reasonably could have been avoided.

(m) Termination for cause. The Government may terminate this contract, or any part hereof, for cause in the event of any default by the Contractor, or if the Contractor fails to comply with any contract terms and conditions, or fails to provide the Government, upon request, with adequate assurances of future performance. In the event of termination for cause, the Government shall not be liable to the Contractor for any amount for supplies or services not accepted, and the Contractor shall be liable to the Government for any and all rights and remedies provided by law. If it is determined that the Government improperly terminated this contract for default, such termination shall be deemed a termination for convenience.

(n) Title. Unless specified elsewhere in this contract, title to items furnished under this contract shall pass to the Government upon acceptance, regardless of when or where the Government takes physical possession.

(o) Warranty. The Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in this contract.

(p) Limitation of liability. Except as otherwise provided by an express warranty, the Contractor will not be liable to the Government for consequential damages resulting from any defect or deficiencies in accepted items.

(q) Other compliances. The Contractor shall comply with all applicable Federal, State and local laws, executive orders, rules and regulations applicable to its performance under this contract.

(r) Compliance with laws unique to Government contracts. The Contractor agrees to comply with 31 U.S.C. 1352 relating to limitations on the use of appropriated funds to influence certain Federal contracts; 18 U.S.C. 431 relating to officials not to benefit; 40 U.S.C. 3701, et seq., Contract Work Hours and Safety Standards Act; 41 U.S.C. 51-58, Anti-Kickback Act of 1986; 41 U.S.C. 265 and 10 U.S.C. 2409 relating to whistleblower protections; 49 U.S.C. 40118, Fly American; and 41 U.S.C. 423 relating to procurement integrity.

(s) Order of precedence. Any inconsistencies in this solicitation or contract shall be resolved by giving precedence in the following order: (1) the schedule of supplies/services; (2) the Assignments, Disputes, Payments, Invoice, Other

Compliances, and Compliance with Laws Unique to Government Contracts paragraphs of this clause; (3) the clause at 52.212-5; (4) addenda to this solicitation or contract, including any license agreements for computer software; (5) solicitation provisions if this is a solicitation; (6) other paragraphs of this clause; (7) the Standard Form 1449; (8) other documents, exhibits, and attachments; and (9) the specification.

(t) Central Contractor Registration (CCR). (1) Unless exempted by an addendum to this contract, the Contractor is responsible during performance and through final payment of any contract for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(2)(i) If a Contractor has legally changed its business name, "doing business as" name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in FAR subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to (A) change the name in the CCR database; (B) comply with the requirements of subpart 42.12; and (C) agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor must provide with the notification sufficient documentation to support the legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (t)(2)(i) of this clause, or fails to perform the agreement at paragraph (t)(2)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.

(3) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the CCR record to reflect an assignee for the purpose of assignment of claims (see Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the CCR database. Information provided to the Contractor's CCR record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the "Suspension of payment" paragraph of the EFT clause of this contract.

(4) Offerors and Contractors may obtain information on registration and annual confirmation requirements via the internet at <http://www.ccr.gov> or by calling 1-888-227-2423 or 269-961-5757.

(End of clause)

#### 52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS--COMMERCIAL ITEMS (JAN 2011)

(a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

(1) 52.222-50, Combating Trafficking in Persons (FEB 2009) (22 U.S.C. 7104(g)).

Alternate I (Aug 2007) of 52.222-50 (22 U.S.C. 7104(g)).

(2) 52.233-3, Protest After Award (AUG 1996) (31 U.S.C. 3553).

(3) 52.233-4, Applicable Law for Breach of Contract Claim (OCT 2004) (Pub. L. 108-77, 108-78).

(b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: (Contracting Officer check as appropriate.)

\_\_\_ (1) 52.203-6, Restrictions on Subcontractor Sales to the Government (SEP 2006), with Alternate I (OCT 1995) (41 U.S.C. 253g and 10 U.S.C. 2402).

\_\_\_ (2) 52.203-13, Contractor Code of Business Ethics and Conduct (APR 2010)(Pub. L. 110-252, Title VI, Chapter 1 (41 U.S.C. 251 note)).

\_\_\_ (3) 52.203-15, Whistleblower Protections under the American Recovery and Reinvestment Act of 2009 (JUN 2010) (Section 1553 of Pub. L. 111-5). (Applies to contracts funded by the American Recovery and Reinvestment Act of 2009.)

\_\_\_ (4) 52.204-10, Reporting Executive Compensation and First-Tier Subcontract Awards (JUL 2010) (Pub. L. 109-282) (31 U.S.C. 6101 note).

\_\_\_ (5) 52.204-11, American Recovery and Reinvestment Act—Reporting Requirements (JUL 2010) (Pub. L. 111-5).

\_\_\_ (6) 52.209-6, Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment (DEC 2010) (31 U.S.C. 6101 note). (Applies to contracts over \$30,000). (Not applicable to subcontracts for the acquisition of commercially available off-the-shelf items).

\_\_\_ (7) 52.219-3, Notice of Total HUBZone Set-Aside or Sole-Source Award (JAN 2011) (15 U.S.C. 657a).

\_\_\_ (8) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (JAN 2011) (if the offeror elects to waive the preference, it shall so indicate in its offer) (15 U.S.C. 657a).

\_\_\_ (9) [Reserved].

\_\_\_ (10)(i) 52.219-6, Notice of Total Small Business Set-Aside (JUNE 2003) (15 U.S.C. 644).

\_\_\_ (ii) Alternate I (OCT 1995) of 52.219-6.

\_\_\_ (iii) Alternate II (MAR 2004) of 52.219-6.

\_\_\_ (11)(i) 52.219-7, Notice of Partial Small Business Set-Aside (JUNE 2003) (15 U.S.C. 644).

\_\_\_ (ii) Alternate I (OCT 1995) of 52.219-7.

\_\_\_ (iii) Alternate II (MAR 2004) of 52.219-7.

\_X\_ (12) 52.219-8, Utilization of Small Business Concerns (JAN 2011) (15 U.S.C. 637 (d)(2) and (3)).

\_X\_ (13)(i) 52.219-9, Small Business Subcontracting Plan (JAN 2011) (15 U.S.C. 637(d)(4)).

\_\_\_ (ii) Alternate I (OCT 2001) of 52.219-9

\_\_\_ (iii) Alternate II (OCT 2001) of 52.219-9.

\_\_\_ (iv) Alternate III (JUL 2010) of 52.219-9.

- \_\_\_ (14) 52.219-14, Limitations on Subcontracting (DEC 1996) (15 U.S.C. 637(a)(14)).
- \_\_\_ (15) 52.219-16, Liquidated Damages--Subcontracting Plan (JAN 1999) (15 U.S.C. 637(d)(4)(F)(i)).
- \_\_\_ (16)(i) 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns (OCT 2008) (10 U.S.C. 2323) (if the offeror elects to waive the adjustment, it shall so indicate in its offer).
- \_\_\_ (ii) Alternate I (JUNE 2003) of 52.219-23.
- \_\_\_ (17) 52.219-25, Small Disadvantaged Business Participation Program--Disadvantaged Status and Reporting (APR 2008) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).
- \_\_\_ (18) 52.219-26, Small Disadvantaged Business Participation Program--Incentive Subcontracting (OCT 2000) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).
- \_\_\_ (19) 52.219-27, Notice of Total Service-Disabled Veteran-Owned Small Business Set-Aside (MAY 2004) (U.S.C. 657 f).
- \_\_\_ (20) 52.219-28, Post Award Small Business Program Rerepresentation (APR 2009) (15 U.S.C. 632(a)(2)).
- \_\_\_ (21) 52.222-3, Convict Labor (JUNE 2003) (E.O. 11755).
- \_\_\_ (22) 52.222-19, Child Labor--Cooperation with Authorities and Remedies (JUL 2010) (E.O. 13126).
- \_\_\_ (23) 52.222-21, Prohibition of Segregated Facilities (FEB 1999).
- X (24) 52.222-26, Equal Opportunity (MAR 2007) (E.O. 11246).
- \_\_\_ (25) 52.222-35, Equal Opportunity for Veterans (SEP 2010) (38 U.S.C. 4212).
- \_\_\_ (26) 52.222-36, Affirmative Action for Workers with Disabilities (OCT 2010) (29 U.S.C. 793).
- \_\_\_ (27) 52.222-40, Notification of Employee Rights Under the National Labor Relations Act (DEC 2010) (E.O. 13496).
- \_\_\_ (28) 52.222-37, Employment Reports on Veterans (SEP 2010) (38 U.S.C. 4212).
- \_\_\_ (29) 52.222-54, Employment Eligibility Verification (JAN 2009). (Executive Order 12989). (Not applicable to the acquisition of commercially available off-the-shelf items or certain other types of commercial items as prescribed in 22.1803.)
- \_\_\_ (30) (i) 52.223-9, Estimate of Percentage of Recovered Material Content for EPA-Designated Items (MAY 2008) (42 U.S.C. 6962(c)(3)(A)(ii)). (Not applicable to the acquisition of commercially available off-the-shelf items.)
- \_\_\_ (ii) Alternate I (MAY 2008) of 52.223-9 (42 U.S.C. 6962(i)(2)(c)). (Not applicable to the acquisition of commercially available off-the-shelf items.)
- \_\_\_ (31) 52.223-15, Energy Efficiency in Energy-Consuming Products (DEC 2007) (42 U.S.C. 8259b)



\_\_\_\_ (32)(i) 52.223-16, IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products (DEC 2007) (E.O. 13423)

\_\_\_\_ (ii) Alternate I (DEC 2007) of 52.223-16.

\_\_\_\_ (33) 52.223-18, Contractor Policy to Ban Text Messaging while Driving (SEP 2010) (E.O. 13513).

\_\_\_\_ (34) 52.225-1, Buy American Act--Supplies (JUNE 2003) (41 U.S.C. 10a-10d).

\_\_\_\_ (35)(i) 52.225-3, Buy American Act--Free Trade Agreements--Israeli Trade Act (JUN 2009) (41 U.S.C. 10a-10d, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note, 19 U.S.C. 3805 note, Pub. L. 108-77, 108-78, 108-286, 108-302, 109-53, 109-169, 109-283, and 110-138).

\_\_\_\_ (ii) Alternate I (JAN 2004) of 52.225-3.

\_\_\_\_ (iii) Alternate II (JAN 2004) of 52.225-3.

\_\_\_\_ (36) 52.225-5, Trade Agreements (AUG 2009) (19 U.S.C. 2501, et seq., 19 U.S.C. 3301 note).

\_\_\_\_ (37) 52.225-13, Restrictions on Certain Foreign Purchases (JUN 2008) (E.O.'s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of the Treasury).

\_\_\_\_ (38) 52.226-4, Notice of Disaster or Emergency Area Set-Aside (Nov 2007) (42 U.S.C. 5150).

\_\_\_\_ (39) 52.226-5, Restrictions on Subcontracting Outside Disaster or Emergency Area (Nov 2007) (42 U.S.C. 5150).

\_\_\_\_ (40) 52.232-29, Terms for Financing of Purchases of Commercial Items (FEB 2002) (41 U.S.C. 255(f), 10 U.S.C. 2307(f))

\_\_\_\_ (41) 52.232-30, Installment Payments for Commercial Items (OCT 1995) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).

\_\_\_\_ (42) 52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration (OCT 2003) (31 U.S.C. 3332).

\_\_\_\_ (43) 52.232-34, Payment by Electronic Funds Transfer--Other than Central Contractor Registration (MAY 1999) (31 U.S.C. 3332)

\_\_\_\_ (44) 52.232-36, Payment by Third Party (FEB 2010) (31 U.S.C. 3332).

\_\_\_\_ (45) 52.239-1, Privacy or Security Safeguards (AUG 1996) (5 U.S.C. 552a).

\_\_\_\_ (46)(i) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) (46 U.S.C. Appx 1241(b) and 10 U.S.C. 2631).

\_\_\_\_ (ii) Alternate I (APR 2003) of 52.247-64.

\_\_\_\_\_

(c) The Contractor shall comply with the FAR clauses in this paragraph (c), applicable to commercial services, that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: (Contracting Officer check as appropriate.)

\_\_\_\_\_ (1) 52.222-41, Service Contract Act of 1965 (Nov 2007) (41 U.S.C. 351, et seq.).

\_\_\_\_\_ (2) 52.222-42, Statement of Equivalent Rates for Federal Hires (MAY 1989) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

\_\_\_\_\_ (3) 52.222-43, Fair Labor Standards Act and Service Contract Act--Price Adjustment (Multiple Year and Option Contracts) (SEP 2009) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

\_\_\_\_\_ (4) 52.222-44, Fair Labor Standards Act and Service Contract Act--Price Adjustment (SEP 2009) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

\_\_\_\_\_ (5) 52.222-51, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment--Requirements (Nov 2007) (41 U.S.C. 351, et seq.).

\_\_\_\_\_ (6) 52.222-53, Exemption from Application of the Service Contract Act to Contracts for Certain Services--Requirements (FEB 2009) (41 U.S.C. 351, et seq.).

\_\_\_\_\_ (7) 52.226-6, Promoting Excess Food Donation to Nonprofit Organizations (Mar 2009) (Pub. L. 110-247).

\_\_\_\_\_ (8) 52.237-11, Accepting and Dispensing of \$1 Coin (SEP 2008)(31 U.S.C. 5112(p)(1)).

(d) Comptroller General Examination of Record. The Contractor shall comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records--Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e) (1) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c), and (d) of this clause, the Contractor is not required to flow down any FAR clause, other than those in this paragraph (e)(1) in a subcontract for commercial items. Unless otherwise indicated below, the extent of the flow down shall be as required by the clause—

(i) 52.203-13, Contractor Code of Business Ethics and Conduct (APR 2010) (Pub. L. 110-252, Title VI, Chapter 1 (41 U.S.C. 251 note)).

(ii) 52.219-8, Utilization of Small Business Concerns (DEC 2010) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$650,000 (\$1.5 million for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(iii) Reserved.

(iv) 52.222-26, Equal Opportunity (MAR 2007) (E.O. 11246).

(v) 52.222-35, Equal Opportunity for Veterans (SEP 2010) (38 U.S.C. 4212).

(vi) 52.222-36, Affirmative Action for Workers with Disabilities (OCT 1998) (29 U.S.C. 793).

(vii) 52.222-40, Notification of Employee Rights Under the National Labor Relations Act (DEC 2010) (E.O. 13496). Flow down required in accordance with paragraph (f) of FAR clause 52.222-40.

(viii) 52.222-41, Service Contract Act of 1965 (Nov 2007) (41 U.S.C. 351, et seq.).

(ix) 52.222-50, Combating Trafficking in Persons (FEB 2009) (22 U.S.C. 7104(g)).

Alternate I (AUG 2007) of 52.222-50 (22 U.S.C. 7104(g)).

(x) 52.222-51, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment--Requirements (Nov 2007) (41 U.S.C. 351, et seq.).

(xi) 52.222-53, Exemption from Application of the Service Contract Act to Contracts for Certain Services--Requirements (FEB 2009) (41 U.S.C. 351, et seq.).

(xii) 52.222-54, Employment Eligibility Verification (JAN 2009).

(xiii) 52.226-6, Promoting Excess Food Donation to Nonprofit Organizations. (MAR 2009) (Pub. L. 110-247). Flow down required in accordance with paragraph (e) of FAR clause 52.226-6.

(xiv) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) (46 U.S.C. Appx 1241(b) and 10 U.S.C. 2631). Flow down required in accordance with paragraph (d) of FAR clause 52.247-64.

(2) While not required, the contractor May include in its subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(End of clause)

#### 52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a Indefinite -Delivery, Indefinite-Quantity , Firm Fixed Price contract resulting from this solicitation.

(End of provision)

## 52.216-18 ORDERING. (OCT 1995)

- (a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from 60 months thereafter.
- (b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.
- (c) If mailed, a delivery order or task order is considered "issued" when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

(End of clause)

## 52.216-19 ORDER LIMITATIONS. (OCT 1995)

(a) Minimum order. When the Government requires supplies or services covered by this contract for a total quantity of MORE THAN twenty-five (25) units, the Government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.

(b) Maximum order. The Contractor is not obligated to honor:

(1) Any order for a combination of items in excess of \$5000,000.00

(2) A series of orders from the same ordering office within 30 days that together call for quantities exceeding the limitation in subparagraph (1) or (2) above.

(c) If this is a requirements contract (i.e., includes the Requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR)), the Government is not required to order a part of any one requirement from the Contractor if that requirement exceeds the maximum-order limitations in paragraph (b) above.

(d) Notwithstanding paragraphs (b) and (c) above, the Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within 14 days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.

(End of clause)

## 52.216-22 INDEFINITE QUANTITY. (OCT 1995)

(a) This is an indefinite-quantity contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the "maximum". The Government shall order at least the quantity of supplies or services designated in the Schedule as the "minimum".

(c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the

number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after 60 months after date of contract.

(End of clause)

#### 52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (JUN 2008)

(a) Except as authorized by the Office of Foreign Assets Control (OFAC) in the Department of the Treasury, the Contractor shall not acquire, for use in the performance of this contract, any supplies or services if any proclamation, Executive order, or statute administered by OFAC, or if OFAC's implementing regulations at 31 CFR chapter V, would prohibit such a transaction by a person subject to the jurisdiction of the United States.

(b) Except as authorized by OFAC, most transactions involving Cuba, Iran, and Sudan are prohibited, as are most imports from Burma or North Korea, into the United States or its outlying areas. Lists of entities and individuals subject to economic sanctions are included in OFAC's List of Specially Designated Nationals and Blocked Persons at TerList1.html. More information about these restrictions, as well as updates, is available in the OFAC's regulations at 31 CFR chapter V and/or on OFAC's Web site at <http://www.treas.gov/offices/enforcement/ofac/>.

(c) The Contractor shall insert this clause, including this paragraph (c), in all subcontracts.

(End of clause)

#### 252.212-7000 OFFEROR REPRESENTATIONS AND CERTIFICATIONS- COMMERCIAL ITEMS. (JUN 2005)

(a) Definitions.

As used in this clause-

(1) Foreign person means any person other than a United States person as defined in Section 16(2) of the Export Administration Act of 1979 (50 U.S.C. App. Sec. 2415).

(2) United States means the 50 States, the District of Columbia, outlying areas, and the outer Continental Shelf as defined in 43 U.S.C. 1331.

(3) United States person is defined in Section 16(2) of the Export Administration Act of 1979 and means any United States resident or national (other than an individual resident outside the United States and employed by other than a United States person), any domestic concern (including any permanent domestic establishment of any foreign concern), and any foreign subsidiary or affiliate (including any permanent foreign establishment) of any domestic concern which is controlled in fact by such domestic concern, as determined under regulations of the President.

(b) Certification.

By submitting this offer, the Offeror, if a foreign person, company or entity, certifies that it -

- (1) Does not comply with the Secondary Arab Boycott of Israel; and
- (2) Is not taking or knowingly agreeing to take any action, with respect to the Secondary Boycott of Israel by Arab countries, which 50 U.S.C. App. Sec. 2407(a) prohibits a United States person from taking.
- (c) Representation of Extent of Transportation by Sea. (This representation does not apply to solicitations for the direct purchase of ocean transportation services).
- (1) The Offeror shall indicate by checking the appropriate blank in paragraph (c)(2) of this provision whether transportation of supplies by sea is anticipated under the resultant contract. The term "supplies" is defined in the Transportation of Supplies by Sea clause of this solicitation.

(2) Representation.

The Offeror represents that it-

☐ Does anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

☐ Does not anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

(3) Any contract resulting from this solicitation will include the Transportation of Supplies by Sea Clause. If the Offeror represents that it will not use ocean transportation, the resulting contract will also include the Defense Federal Acquisition Regulation Supplement clause at 252.247-7024, Notification of Transportation of Supplies by Sea.

(End of provision)

252.212-7001 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS APPLICABLE TO DEFENSE ACQUISITIONS OF COMMERCIAL ITEMS (DEC 2010)

(a) The Contractor agrees to comply with the following Federal Acquisition Regulation (FAR) clause which, if checked, is included in this contract by reference to implement a provision of law applicable to acquisitions of commercial items or components.

☒ 52.203-3, Gratuities (APR 1984) (10 U.S.C. 2207).

(b) The Contractor agrees to comply with any clause that is checked on the following list of Defense FAR Supplement clauses which, if checked, is included in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items or components.

(1) ☐ 252.203-7000, Requirements Relating to Compensation of Former DoD Officials (JAN 2009) (Section 847 of Pub. L. 110-181).

(2) ☐ 252.205-7000, Provision of Information to Cooperative Agreement Holders (DEC 1991) (10 U.S.C. 2416).

(3) ☐ 252.219-7003, Small Business Subcontracting Plan (DoD Contracts) (OCT 2010) (15 U.S.C. 637).

(4) ☐ 252.219-7004, Small Business Subcontracting Plan (Test Program) (OCT 2010) (15 U.S.C. 637 note).

(5)(i)   X   252.225-7001, Buy American Act and Balance of Payments Program (JAN 2009) (41 U.S.C. 10a-10d, E.O. 10582).

(ii)    Alternate I (DEC 2010) of 252.225-7001.

(6)    252.225-7008, Restriction on Acquisition of Specialty Metals (JUL 2009) (10 U.S.C. 2533b).

(7)    252.225-7009, Restriction on Acquisition of Certain Articles Containing Specialty Metals (JUL 2009) (10 U.S.C. 2533b).

(8)   X   252.225-7012, Preference for Certain Domestic Commodities (JUN 2010) (10 U.S.C. 2533a).

(9)    252.225-7015, Restriction on Acquisition of Hand or Measuring Tools (JUN 2005) (10 U.S.C. 2533a).

(10)    252.225-7016, Restriction on Acquisition of Ball and Roller Bearings (DEC 2010) (Section 8065 of Public Law 107-117 and the same restriction in subsequent DoD appropriations acts).

(11) (i)    252.225-7021, Trade Agreements (NOV 2009) (19 U.S.C. 2501-2518 and 19 U.S.C. 3301 note).

(ii)    Alternate I (SEP 2008)

(iii)    Alternate II (DEC 2010) of 252.225-7021.

(12)    252.225-7027, Restriction on Contingent Fees for Foreign Military Sales (APR 2003) (22 U.S.C. 2779).

(13)    252.225-7028, Exclusionary Policies and Practices of Foreign Governments (APR 2003) (22 U.S.C. 2755).

(14)(i)    252.225-7036, Buy American Act--Free Trade Agreements--Balance of Payments Program (DEC 2010) (41 U.S.C. 10a-10d and 19 U.S.C. 3301 note).

(ii)    Alternate I (JUL 2009) of 252.225-7036.

(iii)    Alternate II (DEC 2010) of 252.225-7036.

(iv)    Alternate III (DEC 2010) of 252.225-7036.

(15)    252.225-7038, Restriction on Acquisition of Air Circuit Breakers (JUN 2005) (10 U.S.C. 2534(a)(3)).

(16)   X   252.226-7001, Utilization of Indian Organizations, Indian-Owned Economic Enterprises, and Native Hawaiian Small Business Concerns (SEP 2004) (Section 8021 of Public Law 107-248 and similar sections in subsequent DoD appropriations acts).

(17)   X   252.227-7015, Technical Data--Commercial Items (NOV 1995) (10 U.S.C. 2320).

(18)   X   252.227-7037, Validation of Restrictive Markings on Technical Data (SEP 1999) (10 U.S.C. 2321).

(19)   X   252.232-7003, Electronic Submission of Payment Requests and Receiving Reports (MAR 2008) (10 U.S.C. 2227).

(20) \_\_\_\_ 252.237-7019, Training for Contractor Personnel Interacting with Detainees (SEP 2006) (Section 1092 of Public Law 108-375).

(21) \_\_\_\_ 252.237-7010, Prohibition on Interrogation of Detainees by Contractor Personnel (NOV 2010) (Section 1038 of Pub. L. 111-84).

(22) \_\_\_\_ 252.243-7002, Requests for Equitable Adjustment (MAR 1998) (10 U.S.C. 2410).

(23) X 252.246-7004, Safety of Facilities, Infrastructure, and Equipment for Military Operations (OCT 2010) (Section 807 of Public Law 111-84).

(24) \_\_\_\_ 252.247-7003, Pass-Through of Motor Carrier Fuel Surcharge Adjustment to the Cost Bearer (SEP 2010) (Section 884 of Public Law 110-417).

(25)(i) \_\_\_\_ 252.247-7023, Transportation of Supplies by Sea (MAY 2002) (10 U.S.C. 2631).

(ii) \_\_\_\_ Alternate I (MAR 2000) of 252.247-7023.

(iii) \_\_\_\_ Alternate II (MAR 2000) of 252.247-7023.

(iv) \_\_\_\_ Alternate III (MAY 2002) of 252.247-7023.

(26) \_\_\_\_ 252.247-7024, Notification of Transportation of Supplies by Sea (MAR 2000) (10 U.S.C. 2631).

(c) In addition to the clauses listed in paragraph (e) of the Contract Terms and Conditions Required to Implement Statutes or Executive Orders--Commercial Items clause of this contract (FAR 52.212-5), the Contractor shall include the terms of the following clauses, if applicable, in subcontracts for commercial items or commercial components, awarded at any tier under this contract:

(1) 252.237-7019, Training for Contractor Personnel Interacting with Detainees (SEP 2006) (Section 1092 of Public Law 108-375).

(2) 252.237-7010, Prohibition on Interrogation of Detainees by Contractor Personnel (NOV 2010) (Section 1038 of Pub. L. 111-84).

(3) 252.247-7003, Pass-Through of Motor Carrier Fuel Surcharge Adjustment to the Cost Bearer (SEP 2010) (Section 884 of Public Law 110-417).

(4) 252.247-7023, Transportation of Supplies by Sea (MAY 2002) (10 U.S.C. 2631).

(5) 252.247-7024, Notification of Transportation of Supplies by Sea (MAR 2000) (10 U.S.C. 2631).

(End of clause)

#### CAR-I10 AUTHORIZED CHANGES ONLY BY THE CONTRACTING OFFICER (JUN 1996) (NSWCCD)

(a) Except as specified in paragraph (b) below, no order, statement, or conduct of Government personnel who visit the Contractor's facilities or in any other manner communicates with Contractor personnel during the performance of this contract shall constitute a change under the "Changes" clause of this contract.



(b) The Contractor shall not comply with any order, direction or request of Government personnel unless it is issued in writing and signed by the Contracting Officer, or is pursuant to specific authority otherwise included as a part of this contract.

(c) The Contracting Officer is the only person authorized to approve changes in any of the requirements of this contract and notwithstanding provisions contained elsewhere in this contract, the said authority remains solely the Contracting Officer's. In the event the contractor effects any change at the direction of any person other than the Contracting Officer, the change will be considered to have been made without authority and no adjustment will be made in the contract price to cover any increase in charges incurred as a result thereof. The address and telephone number of the Contracting Officer is:

NAME           Annette Bucci  
ADDRESS       Naval Surface Warfare Center, Carderock Division, Philadelphia, Code 3351,  
                  5001 South Broad Street, Philadelphia, PA 19112  
TELEPHONE     215-897-7770

#### CAR-K01 ELECTRONIC DISTRIBUTION OF CONTRACT DOCUMENTS (APR 2006)

(a) The DoD Electronic Document Access (EDA) provides World Wide Web access to documents used to support the procurement, contract administration, bill paying, and accounting processes. EDA is being used by the Naval Surface Warfare Center, Carderock Division to electronically distribute all contract award and contract modification documents, including task and delivery orders. The contractor will be sent a notification email when a contractual document has been uploaded for distribution. The contractor will be required to register as a vendor on the EDA web site (<http://eda.ogden.disa.mil>) in order to view/download their company's contractual documents. The files posted are in .pdf format and may be accessed using Adobe Acrobat Reader. Adobe Acrobat Reader is a free software that may be downloaded at <http://www.adobe.com/products/acrobat/readstep.html>.

(b) Offerors must provide the following information that will be used to make electronic distribution for any resultant contract.

Name of Point of Contact \_\_\_\_\_

Phone Number for Point of Contact \_\_\_\_\_

E-mail Address for Receipt of Electronic Distribution \_\_\_\_\_

#### HQ G-2-0003 CONTRACTING OFFICER'S REPRESENTATIVE

(a) The COR for this contract is:

ANDY GUO CODE 937  
Naval Surface Warfare Center Carderock Division Philadelphia  
Building 542, Shipping and Receiving  
1601 Langley Ave  
Philadelphia, PA 19112-5083

ANDY.GUO@NAVY.MIL  
215-897-8543

The Contractor shall forward a copy of all invoices to the Contracting Officer's Representative.

#### HQ G-2-0007 INVOICE INSTRUCTIONS (NAVSEA) (JAN 2008)

(a) In accordance with the clause of this contract entitled "ELECTRONIC SUBMISSION OF PAYMENT REQUESTS" (DFARS 252.232-7003), the Naval Sea Systems Command (NAVSEA) will utilize the DoD Wide Area Workflow Receipt and Acceptance (WAWF) system to accept supplies/services delivered under this contract. This web-based system located at <https://wawf.eb.mil> provides the technology for government contractors and authorized Department of Defense (DoD) personnel to generate, capture and process receipt and payment-related documentation in a paperless environment. Invoices for supplies/services rendered under this contract shall be submitted electronically through WAWF. Submission of hard copy DD250/invoices may no longer be accepted for payment.

(b) It is recommended that the person in your company designated as the Central Contractor Registration (CCR) Electronic Business (EB) Point of Contact and anyone responsible for the submission of invoices, use the online training system for WAWF at <http://wawftraining.com>. The Vendor, Group Administrator (GAM), and sections marked with an asterisk in the training system should be reviewed. Vendor Quick Reference Guides also are available at <http://acquisition.navy.mil/navyaos/content/view/full/3521/>. The most useful guides are "Getting Started for Vendors" and "WAWF Vendor Guide".

(c) The designated CCR EB point of contact is responsible for activating the company's CAGE code on WAWF by calling 1-866-618-5988. Once the company is activated, the CCR EB point of contact will self-register under the company's CAGE code on WAWF and follow the instructions for a group administrator. After the company is set-up on WAWF, any additional persons responsible for submitting invoices must self-register under the company's CAGE code at <https://wawf.eb.mil>.

(d) The contractor shall use the following document types, DODAAC codes and inspection and acceptance locations when submitting invoices in WAWF:

Type of Document (*contracting officer check all that apply*)

- ☒ Invoice (FFP Supply & Service)
- ☐ Invoice and Receiving Report Combo (FFP Supply)
- ☐ Invoice as 2-in-1 (FFP Service Only)
- ☐ Cost Voucher (Cost Reimbursable, T&M , LH, or FPI)
- ☐ Receiving Report (FFP, DD250 Only)

DODAAC Codes and Inspection and Acceptance Locations (*contracting officer complete appropriate information as applicable*)

Issue DODAAC	<u>N65540</u>
Admin DODAAC	<u>TBD</u>
Pay Office DODAAC	<u>TBD</u>

Inspector DODAAC	N/A
Service Acceptor DODAAC	N65540
Service Approver DODAAC	N/A
Ship To DODAAC	See Section F
DCAA Auditor DODAAC	N/A
LPO DODAAC	N/A
Inspection Location	N65540
Acceptance Location	N65540

Attachments created in any Microsoft Office product may be attached to the WAWF invoice, e.g., backup documentation, timesheets, etc. Maximum limit for size of each file is 2 megabytes. Maximum limit for size of files per invoice is 5 megabytes.

(e) Before closing out of an invoice session in WAWF, but after submitting the document(s), you will be prompted to send additional email notifications. Click on "Send More Email Notification" and add the acceptor/receiver email addresses noted below in the first email address block, and add any other additional email addresses desired in the following blocks. This additional notification to the government is important to ensure that the acceptor/receiver is aware that the invoice documents have been submitted into WAWF.

Send Additional Email Notification To:
Andy.guo@navy.mil

(f) The contractor shall submit invoices/cost vouchers for payment per contract terms and the government shall process invoices/cost vouchers for payment per contract terms. Contractors approved by DCAA for direct billing will submit cost vouchers directly to DFAS via WAWF. Final voucher submission will be approved by the ACO.

(g) The WAWF system has not yet been implemented on some Navy programs; therefore, upon written concurrence from the cognizant Procuring Contracting Officer, the Contractor is authorized to use DFAS's WInS for electronic end to end invoicing until the functionality of WInS has been incorporated into WAWF.

(h) If you have any questions regarding WAWF, please contact the WAWF helpdesk at the above 1-866 number or the NSWC-CD WAWF P.O.C.s Thomas Evans at (301) 227-0589 or LaShawn Fortson at (301) 227-5419.